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ABSTRACT

A study was made of the repetition of child abuse. (This repetition is sometimes referred to as recurrence or recidivism). The central feature of the research strategy was a followup on a group of families cited for abuse, conducted to determine the degree to which abuse had recurred or had been discontinued and to assess the conditions associated with these behaviors. To accomplish this, two activities were undertaken. One activity provided for analysis of existing records relating to the families' abusive treatment of their children. The other consisted of interviews of heads of families about the situation at the time of the initial abuse citation and about the parents' background, particularly with respect to child rearing practices the parents had themselves experienced. An interview instrument and case record review procedures were developed, the child abuse literature was examined, and an instrument was designed to assess hypotheses regarding antecedents of abuse. A total of 328 families residing in two Pennsylvania counties participated in the study. Data analysis initially focused on the recurrence or discontinuation of abuse; the relationship between indicators of recurrence and possible causes of recurrence were then examined. Finally, the effectiveness of services in reducing or preventing the recurrence of abuse was assessed. (Numerous results are discussed, and implications for protecting children are pointed out.) (RH)

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THE RECURRENCE OF ABUSE IN CHILD-ABUSING FAMILIES

FINAL REPORT

from the project:

"An Investigation of the Effects of a Multidimensional Service Program on Recidivism/Discontinuation of Child Abuse and Neglect"

by

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PREFACE

The document that follows is the final report for the project, "An Investigation of the Effects of a Multi-dimensional Service Program on Recidivism/Discontinuation of Child Abuse and Neglect." The project was supported by the National Center on Child Abuse and Neglect, Children's Bureau of the Administration on Children, Youth and Families, U. S. Department of Health, Education and Welfare.

A comment is in order regarding the stage of thinking this report represents. The study was initiated in 1975, and the data were gathered in 1976-77. In undertaking the study, the opportunity was provided to follow up on all families charged with abuse over a ten-year period in two Pennsylvania counties. The fact that we were studying the entire population presented a rare opportunity to determine the characteristics of the full range of abusive families, as well as something of their dynamics. Furthermore, the study provided an opportunity to examine the rather wide variety of hypotheses about why abuse occurs. In response to this opportunity, the staff of the project gathered detailed data from the different sources available.

In order to explore the different hypotheses about the causes of abuse, a 92-page interview was developed. The case record review system was very detailed and covers all entires in the case record for a family. The hospital birth records are also detailed. The resulting amount of data is sizeable.

The present report represents a "first pass" at the available data. In the course of doing the analyses reported here, at least a many questions were raised as were answered. While this can be expected at this stage, the result is a report which leaves a number of questions unanswered.

Our intention is not to let this situation exist for long. We have already begun looking in more depth at specific topics covered in this report. The results are being submitted for publication; three have been completed and accepted for publication. One focuses on the occurrence of repeated abuse, and is to be presented at the Second International Congress on Child Abuse and Neglect.* A second focuses on findings from the children's birth records.** A third compares the effects of parent group therapy and parents' participation in religious groups.*** Others are in progress.

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*R. C. Herrenkohl and E. C. Herrenkohl, The repetition of child abuse: How frequently does it occur?, to be published by Pergamon Press, Inc., N.Y.

**E. C. Herrenkohl and R. C. Herrenkohl, A comparison of abused children and their non-abused siblings, accepted for publication by the Journal of the American Academy of Child Psychiatry.

***E. C. Herrenkohl, Parallels in the process of achieving personal growth by abusing parents through participation in group therapy programs or in religious groups, The Family Coordinator, July 1978.

A further step will be to conduct more detailed statistical analyses of the results presented here to identify the best predictors of recurrent abuse. Our hope is to develop a method which will be of assistance to child abuse workers in identifying families in which abuse is likely to recur.

We would like to thank those who made this study possible: the National Center on Child Abuse and Neglect which provided funds, and both its Director, Douglas Besharov, and the NCCAN project manager, Cecelia Sudia, who have helped in many ways with their interest and suggestions.

The research could not have been done without the cooperation, assistance, and encouragement of the two child welfare programs* which participated in the study. These are the Children and Youth Division of Northampton County (Pa.), R. Nancy Haley MSW, Director; and the Lehigh County Office of Children and Youth Services, George Yoder MSW, Director. Appreciation is due their staffs and particularly the supervisors, Joyce McLaughlin MSW and Kevin Dolan MSW in Northampton County and Edward Herman MSW, David Lehr, and Suzanne Mengel in Lehigh County.

Also, thanks are due those agencies and their staff who participated in what is a community-wide effort especially Helen Ruch MSW, Co-Therapist, and Raymond Seckinger MD, Therapist from the Lehigh County Mental Health/Mental Retardation program; Robert Wisser EdD, Therapist, from the Northampton County Mental Health/Mental Retardation program; Patricia Levin M Ed., Director of the Head Start program of the Lehigh Valley (Pa.); and Rhoda Russell, Supervisor of Head Start's Home Start program.

Finally, we are grateful to the CSR staff who worked long and hard on this study: Catherine Barrett, Alicia Bauman, Anne Beidler, Margaret Bilheimer, Mary Lou Bross, Marlee Campbell, Candice Crawford, Erika Eberhardt, Mark Jamison, Janice Kay, Marlene Krajczar, Leila Lerch, Monica Sibley and Lori Toedter.

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*A description of the child abuse treatment program developed by these agencies is described in a document, The Treatment of Families Exhibiting Violence Toward Children.

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I. Introduction

A. Aims and objectives

The present study proposed three goals: (1) to identify the recurrence of child abuse, (2) to determine the conditions which are related to recurrence, and (3) to identify factors which alleviate the conditions which are related to recurrent abuse. In the present report the amount of detail provided roughly follows the order of these objectives.

The importance of assessing recurrence rests in the often identified phenomenon that the abuse of a child occurs more than once. Thus, while there is undoubtedly value in identifying families or individuals at risk for abuse before abuse actually occurs, there is also an important step to be taken in identifying an individual's or family's potential for repeated abuse once an incident has occurred. Indeed, given the difficulties surrounding efforts to predict "at risk" families or individuals, it may eventually be found that the identification of conditions related to repeated abuse may provide a focus from which service providers can proceed to identify families in which there is a potential for future abuse.

B. Definitions of central concepts

1. Abuse

a. What represents an occurrence of abuse?

The present study was not intended to go into the issue of defining "abuse." However, shortly after its initiation it became clear that certain assumptions made in designing the study were not valid. First, it had been assumed that the citations* for abuse represented a major portion, if not all, of the abusive families known to the agency. This assumption became questionable when we discovered families who had never received a citation but had recorded in their case records incidents of harsh treatment of children comparable to those listed for the cited group of families. Thus it became clear that to some extent "cited" families do not represent all abusive families, even among families served by a child-welfare agency.

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*In the State of Pennsylvania where this study was conducted, "citation" is the mandated form of reporting child abuse incidents.

A second assumption, similarly discovered to be unfounded, was that once a family was cited for abuse, subsequent abuse by that family led to further citations. In reading the case records of cited families, as is documented below, it was found that some families have additional incidents comparable to those that were cited, but with no corresponding citations.

As a result of this discovery, our perspective on repetition of abuse was broadened to include indices both of the types of abuse incidents included in citations and uncited child abuse incidents recorded in the case record. Table 1 lists types of incidents included on abuse citations and examples of incidents in case records which are defined as abusive incidents.

In essence, the approach to identification of abuse that was chosen was to use both cited incidents and comparable non-cited incidents in the case record. In the remainder of this report, an effort will be made to keep these distinct by referring to the former as "citations" and to the latter as "incidents."

b. What are the types of abuse?

Another "discovery" was that in some families there was more than one type of abuse identified, even though only one type was "cited." In the material that follows, different types of abuse will be distinguished: physical abuse, emotional abuse, sexual abuse, and gross neglect. These follow more or less the generally accepted definitions, i.e. physical abuse involves non-accidental, serious physical harm to the child; emotional abuse involves serious emotional harm to the child; sexual abuse involves sexual activity with a child; and gross neglect involves nutritional or medical neglect which is immediately dangerous to the health of the child (this latter type includes the "failure to thrive" syndrome). Analyses of child abuse often do not distinguish between these different types of abuse, but simply refer to "child abuse." Along with consideration of the four different type of abuse noted above, all types taken together will also be considered.

A note of caution is in order. The procedure for counting incidents in the case record was the same for the different types of abuse. However, identification of an incident to be recorded in the record is likely to differ depending on the type of abuse. For example, physical abuse is more readily identified in incidents than neglect which is a more continuous process. The results which follow should be interpreted with this in mind.

c. What are the ways of counting abuse?

Three ways of counting occurrences of abuse are used in the following analyses. One is to count by "family," meaning all incidents involving any of the children in the family. Another is to count by "perpetrator." The third is to count by the child who is the target of abuse.

TABLE 1. Abusive methods *

P = Physical abuse
S = Sexual abuse
E = Emotional Abuse
N = Neglect

Isolate in dark room/closet	(E)
Lock out of house, kick out	(E)
Take meals away	(N)
Threaten to leave	(E)
Threaten to send away/put away	(E)
Biting	(P)
Bite--left bruise	(P)
Pepper in mouth	(P)
Shake (an infant)	(P)
Hit--leaving bruise, beat	(P)
Burn--leaving marks	(P)
Bump or push against something, pushing off something, throw around	(P)
Punching (in stomach, face)	(P)
Sexual abuse, rape	(S)
Physical neglect (failure to thrive; maternal deprivation)	(N)
Abandonment, desertion	(N)
Shot gun at	(P)
Choke, strangle	(P)
Attempt use of knife/hatchet	(P)
Force to eat raw onions, tabasco sauce	(P)
Kick, step on	(P)
Inappropriate use of drugs	(P)
Grabbing (limb, twisting arms, at person)	(P)
Use of knife, stabbing	(P)
Use of scissors, cutting, use of saw	(P)
Cover face with pillow, bags	(P)
Lack of medical attention	(N)
Pin pricks--jab with pencil, fork puncture	(P)

(Continued on next page)

TABLE 1. Abusive methods*(continued)

Threaten to kill	(E)
Pull or swing by limb	(P)
Throw things at person	(P)
Put in freezer	(P)
Assault, physical violence	(P)
Head in toilet	(P)
Threaten to burn	(E)
Lock in car	(P)
Lock in car trunk	(P)
Threaten to harm	(E)
Inject unknown substance into person	(P)
Threaten to shoot	(E)
Attempt to kill (gas)	(P)
Push head in dishwater	(P)

*A study is under way to validate the label "abusive" attached to the different types of incidents. This study also considers the designations, emotional and physical.

2. Recurrence and recidivism

The focus of the present study is repeated abuse, sometimes referred to as recurrence and sometimes as recidivism. During the course of the study, it became apparent that a clear distinction between these terms would be helpful. Thus recurrence came to be defined as an incident of abuse that occurred after any earlier incident, regardless of the stage of service provision. Recidivism was defined in a more restricted way. The most general of three definitions involved any repeated incident of abuse occurring after termination of service provided in response to a family's first valid citation for abuse. The latter is referred to as the "first opening" and subsequent openings are referred to as "second," "third," and so forth. Other less general definitions involved incidents occurring after the first opening but before the second opening and incidents occurring during or after the second opening. Analyses related to these latter definitions have been done but are not described in the present report since they provide little toward understanding recurrent abuse.

A further consideration in the recidivism/recurrence distinction is the issue of "prior abuse." In some instances prior abuse was indicated in the case record with no prior citation. As a result the incident which led to the initial citation could in fact be regarded as repetition of abuse.

The implication is that the most accurate picture of recurrence of abuse could be obtained by piecing together items of information from both the citations and the case record.

3. Family

At various points in the present study, the question arose: - What is a family? For the purposes of the present analyses, it was defined as at least the nuclear mother-child(ren) set. For example, there are instances where a male head, female head, and children have broken up -- most often with the male head leaving. In such a case, the female head and her children were considered the family.

II. Research Strategy

A. Overview

The central feature of the research strategy was to follow up on a group of families cited for abuse to determine the degree to which abuse had recurred or had been discontinued, and the conditions associated with recurrence or discontinuation of abuse. To accomplish this, two types of activities were undertaken. One was to analyze existing records relating to the family's abusive treatment of their children. This information included the actual citation, the case record, and hospital records on the children when these could be obtained.

The other type of activity was to interview one or, if possible, both heads of the family to gather information indicating the family's situation at the time of the initial abuse citation, and information on the parent's background, particularly the child-rearing practices that the parent experienced.

The gathering and coding of each type of information was approached in somewhat the same way: examples of the anticipated information were reviewed; a preliminary data-gathering instrument was developed; the instrument was pilot-tested and adjusted until the staff was satisfied with its adequacy; it was then put into full-scale use. Both the interview instrument and the case record review procedures were developed in this way: the child-abuse literature was examined, and an instrument was designed to assess the principal hypotheses regarding the antecedents or supposed causes of abuse.

Analysis of the resulting data focused on the recurrence or discontinuation of abuse. In order to identify where recurrence or discontinuation existed, all sources of available data were coordinated and analyzed. The results of this analysis provided a set of variables which reflect on recurrence from a variety of perspectives. In effect, these variables provide the dependent variables of the study.

The next stage of the research strategy was to examine the relationship between the indicators of recurrence and information related to the different hypotheses about the antecedents or causes of recurrence.

The final stage of the research was the examination of the effectiveness of services in reducing or preventing the recurrence of abuse. This involved the establishment of criteria indicative of the trend of recurrence, then the examination of the relationship between the amount and type of services provided and the nature of that trend.

B. Participant sample

The pool of potential participants (estimated in the proposal as 380 families) was originally defined as all families cited for child abuse since 1967 (when the present procedure of citing families for abuse was instituted) who had received at least one year of service at the time the interview was to be conducted. This criterion was maintained except for ten families who had not been cited for abuse but were considered "high risk for abuse." The total number of families fitting these criteria was 328.

Of these, 10 were the families who had never been cited and an additional 58 were families who had been cited but whose citation was subsequently found to be not valid. (The citation for one family was assumed to be valid although the record read "unknown.")

The families whose first and only citations were invalidated had in fact received "services" only in a technical sense, that is, whatever was necessary to identify the invalid status of the citation. Furthermore, both the research staff and the service staff were concerned not to invade the privacy of these families. For these reasons, it was decided not to approach these families to seek interviews. However, their case records were read and the citations analyzed.*

It was intended that only families where the case was closed, that is, the service relationship with the child welfare agency had been terminated, would be included in the pool. However, when the analysis of citations was done it was found that many of the most severe cases were not closed. Specifically 26% of the families remained on the open caseload. In fact, it was found that the least severe or invalidated cases tended to be closed while the most severe cases continued open for years, either to provide support to the family or because as long as a child was in placement, the case continued to be open. As a result of these findings, the criteria for inclusion in the study were redefined to include any family cited for abuse (or included in the abuse units of the child welfare agencies) whose case was closed or whose case had been open for a minimum of one year.

C. Data-gathering instruments

1. Analysis of citations

The first step in the follow-up study was development of a procedure for analyzing the abuse citations. The nature of the procedure was partially defined by the fact that the citation itself contained certain information. What was needed was a coding procedure which in effect listed the different responses that were given to the information specified by the citation form. An analysis of the citations against each family included

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*While any family participating in the interview had to give informed consent, access to the agency records was provided for under the CSR contractual arrangement with the Children's Bureaus by which the research staff is defined as a component of the Bureau's multidisciplinary service team.

in the present study is given below. Appendix A provides a copy of the coding system used to analyze the citations.

2. Interview instrument

The interview instrument as noted above was developed after an extensive review of the literature and in consultation with the child abuse service staffs. The measurement strategy employed was to use multiple items to assess each key issue, then, in subsequent analysis, to attempt to develop a general index or several indices of these key issues. Appendix B provides a copy of the interview instrument and the full coding system.

3. Case record assessment

The case record review instrument was developed as a content analysis procedure intended to follow as closely as possible the same issues covered in the interview instrument. Appendix C provides the case record review coding system.

4. Birth record assessment

The birth record assessment procedure examined issues related to the birth of the child. Appendix D provides the birth record assessment coding procedure.

D. Assessment of the recurrence of abuse

In the description of central concepts (above), several distinctions were made which bear on the assessment of recurrence. To summarize, these were:

Type of abuse occurrence

Citation: A formal (legal) report of an abuse incident.

Incident: Any occurrence of abuse to a child that is formally reported or is comparable to incidents that are reported and is recorded in a family's case record.

Nature of abuse incident

Physical: non-accidental physical harm to child

Sexual: sexual activity by adult with child

Emotional: threatening child with abandonment or violence, or locking child in a dark place

Neglect: abandonment, desertion, nutritional or medical neglect which is immediately dangerous to child's health

All forms: all of the above

Type of repetition

Recurrence: An incident of abuse after an initial incident.

Recidivism: An incident of abuse after the termination of services for abuse.

Focus of repetition

Perpetrator: The person to whom the abuse is attributed.

Target: The child who is the object of the abuse incident.

Family: The nuclear family and others living in the household who may be involved in childrearing; at least a caretaker and her or his child/children.

In the preceding, the instruments used to gather the raw data were described. With these data available, it then became a question of operationally defining the focal issue of the study, recidivism/recurrence. This proved to be a complex task, since there are three perspectives in terms of which repeated abuse can be approached; repeated abuse in a family, repeated abuse by a particular individual (perpetrator), and repeated abuse of a particular child (target). There is logically a fourth perspective on repeated abuse between a specific perpetrator and a specific target; however, such an analysis will not be pursued until the initial three have been completed.

The second perspective from which repeated abuse can be examined is the type of abuse -- physical, emotional, sexual, (gross) neglect, or "all" abuse which does not distinguish between the types but rather treats them together. The import of these distinctions is that the conditions associated with abuse may or may not differ depending on the type of abuse.

In order to determine whether these distinctions had any practical implications (our impressions were that the number of incidents could differ considerably, depending on the perspective), a scheme was designed to tabulate

incidents of abuse relative to each perspective. While there are different ways this scheme can be employed, as will be described below, the scheme involves frequency counts for each family in each cell of the following layout.

Focus	Family	Perpetrators (2)*	Targets (4)*
Type of abuse			
Physical	--	--	--
Emotional	--	--	--
Sexual	--	--	--
Neglect	--	--	--
TOTAL	--	--	--

With this scheme for counting in mind, it became evident that different results would be found, depending on whether one counted formal citations or all incidents that were recorded. Since it was of interest to determine whether the two types of counts gave different results, it was decided to count separately the frequency of citations and of incidents.

The issue of recurrence (i.e. repeated abuse incidents) and of recidivism (i.e. the occurrence of abuse after termination of service) was then considered. The first problem was to identify what came to be referred to as "prior" abuse, that is, abuse that was known to have occurred before the first citation received by a family. The citation itself sometimes indicated the fact of known prior abuse, as did the case record in some cases. The importance of this information was that the first citation received by a family might be a repeated incident. Any incident which followed a first incident in time was counted in the index of recurrence.

The next step was to identify recidivism, that is, occurrences of abuse after the termination of service. As is described above (p. 5), the procedure was to identify the date when service, provided in response to the first valid abuse citation, was terminated; then count the occurrences of abuse after that date.

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*Since more than one perpetrator could be involved in abuse in a family, and more than one target could be involved, separate counts were done for up to 2 perpetrators and up to 4 targets in a family.

III. Results

A. Case record analysis

1. Recurrence

In order to examine the issue of repetition of abuse, the nature of the criteria for such judgments needs to be examined. Several questions were asked about the data, in order of increasing specificity. These are outlined below.

The total population served by the abuse units of the child welfare agencies during the time period studied has been broken into 3 overlapping groups, one or another of which appeared to be the most appropriate base group(s) to be used for the following analyses. These groups are as follows:

(1) All families served by the abuse units (N = 328) during 1967-1976;

(2) All families with at least one valid citation (N = 260) during 1967-1976;

(3) All families with at least one verified incident of abuse (N = 286) during 1967-1976.

Of the 328 families who were served by the abuse units of the two agencies during the time period studied, 318 received citations. Table 2 summarizes data on the validity of the citations for suspected abuse received by these families. Of the 318 families who received a citation, the validity status of the first citation is known for all but one of the families. Of these citations 252 (79.2%) were determined to be valid. The one family the validity of whose first citation was unknown later received a valid citation. In addition, 7 of the 65 families whose first citation was determined to be invalid subsequently received a valid citation. Thus, 260 families during the time period studied received at least one valid citation, and 58 families whose first citation was invalidated never received a valid citation.

In some of the analyses below, the total group of 328 families served by the abuse units is analyzed. Other analyses are based on the 260 families with at least one valid citation. A third way of breaking the total group up is based on there being an indication in the families' case records of an incident

TABLE 2: Validity status of citations received by all families served by the abuse units (N = 328) and by subgroup of families who received at least one valid citation (N = 260)

Is Citation Valid?	First Citation				Second Citation			
	All Abuse Unit Families		Validly Cited Families		All Abuse Unit Families		Validly Cited Families	
	No.	%	No.	%	No.	%	No.	%
No	65	19.8	7	2.7	13	4.0	6	2.3
Yes	252	76.8	252	96.9	59	18.0	59	22.7
Unknown or not cited	11	3.4	1	.4	256	78.0	195	75.0
TOTAL	328	100.0	260	100.0	328	100.0	260	100.0

Is Citation Valid?	Third Citation				Fourth Citation			
	All Abuse Unit Families		Validly Cited Families		All Abuse Unit Families		Validly Cited Families	
	No.	%	No.	%	No.	%	No.	%
No	2	.6	2	.8	1	.3	1	.4
Yes	13	4.0	13	5.0	5	1.5	5	1.9
Unknown or not cited	313	95.4	245	94.2	322	98.2	254	97.7
TOTAL	328	100.0	260	100.0	328	100.0	260	100.0

Is Citation Valid?	Fifth Citation			
	All Abuse Unit Families		Validly Cited Families	
	No.	%	No.	%
No	-	-	-	-
Yes	1	.3	1	.4
Unknown or not cited	327	99.7	259	99.6
TOTAL	328	100.0	260	100.0

which could be considered abusive (even if not "cited") according to the conservative scoring criteria used in the study. Although only 260 families received a valid citation, the case records of 286 families have a description of at least one abusive incident. For many analyses, this group of 286 families seemed to be the most appropriate group to use.

The point of the three different bases for analysis is that different recurrence or recidivism rates result depending on which is used. In analyzing the results that follow, one or more will be used depending on its relevance to the question at issue.

a. What proportion of all the families received more than one citation?

Where all families served by the abuse unit are included (N = 328), 22.3% are found to have repeated citations (Table 3). Where only validly cited families are included (N = 260), a slightly higher proportion (25.4%) received at least one more citation for abuse (Table 3). Of these latter 66 families, 50 (19.2%) received 2 citations and 16 (6.2%) received more than 2 citations. Of the 89 total second, third, fourth, or fifth citations represented by these "repeaters," 78 were valid citations. Analysis of family records which contain at least one incident of abuse (whether cited or not) (N = 286) reveals that 25.1% have more than one citation (Table 3).

To summarize, approximately one-fourth of the families received more than one citation, with slight deviations from this proportion depending upon whether one takes as the base the total population handled by the abuse units of the child welfare agencies, the families who have at least one documented abuse incident, or the families who were legally and validly cited for abuse.

b. Does the proportion of repeated citations differ depending on the type of abuse?

Table 4 gives the numbers of citations per family by type of abuse. Considering only families with valid citations (Table 4a), there are repeated citations for physical abuse in 20.4% of the families. When families with at least one verified incident of abuse are the focus (Table 4b), the proportion with repeated citations for physical abuse is 19.2%. The respective percentages for repeated neglect are 2.7% and 3.1%. Re-citation for sexual abuse is almost zero.

TABLE 3: Number of citations per family, 1967-1976

Number of Citations	All Families Served		Families with at Least One Valid Citation		Families with at Leas One Verified Incident	
	No.	%	No.	%	No.	%
0	10	3.1	-	-	9	3.1
1	245	74.7	194	74.6	205	71.8
2	57	17.3	50	19.2	56	19.6
3	10	3.1	10	3.9	10	3.5
4	5	1.5	5	1.9	5	1.7
5	1	.3	1	.4	1	.3
TOTAL	328	100.0	260	100.0	286	100.0

TABLE 4: Numbers of citations per family by type of abuse

a) Families with at least one valid citation (N = 260)

Number of Citations	Families Cited for Physical Abuse		Families Cited for Emotional Abuse		Families Cited for Sexual Abuse		Families Cited for Neglect	
	No.	%	No.	%	No.	%	No.	%
0	34	13.1	259	99.6	251	96.5	227	87.3
1	173	66.5	1	.4	8	3.1	26	10.0
2	43	16.5	-	-	-	-	7	2.7
3	5	1.9	-	-	1	.4	-	-
4	3	1.2	-	-	-	-	-	-
5	2	.8	-	-	-	-	-	-
TOTAL	260	100.0	260	100.0	260	100.0	260	100.0

b) Families with at least one verified abuse incident (N = 286)

Number of Citations	Families Cited for Physical Abuse		Families Cited for Emotional Abuse		Families Cited for Sexual Abuse		Families Cited for Neglect	
	No.	%	No.	%	No.	%	No.	%
0	47	16.4	285	99.7	277	96.9	245	85.7
1	184	64.4	1	.3	8	2.8	32	11.2
2	44	15.4	-	-	1	.3	9	3.1
3	6	2.1	-	-	-	-	-	-
4	3	1.0	-	-	-	-	-	-
5	2	.7	-	-	-	-	-	-
TOTAL	286	100.0	286	100.0	286	100.0	286	100.0

c. What proportion of the families have more than one incident?

The occurrence of an "incident" of abuse was determined from the case records. The number of incidents coded from the record ranges from 1 up to as many as 17 abusive incidents in a family (Table 5).

The proportion of families with more than one incident of abuse, whether or not these incidents have been legally cited, is considerably higher than the proportion of families receiving more than one citation (Table 5). The summary Table 6 indicates that this proportion ranges from 58.5% of all the families handled by the abuse units, to 64.6% of families with at least one valid citation to 66.8% of those families who have at least one documented incident of abuse in their case records.

Clearly, the amount of repetition of abuse is underestimated by the number of repeated citations for abuse.

d. Does the proportion of repeated incidents differ depending on the type of abuse?

In Table 7a the 260 families with at least one valid citation are considered by type of abuse. Where physical abuse is involved, 52.7% have more than one incident. For emotional abuse 21.1% have more than one incident. Where sexual abuse is considered there is a 30.8% repetition rate. For neglect the repetition rate is 45.1%.

In Table 7b the 286 families in which there was at least one verified incident of abuse are analyzed. Among families where there is physical abuse 54.1% have more than one abuse incident; for emotional abuse, 21.4% have more than one incident; for sexual abuse, 29.6% have more than one abuse incident; and for neglect, 44.4% have more than one abuse incident.

e. Does repetition of abuse differ depending on whether one or more types of abuse are involved?

In Table 8, the 286 families with at least one abuse incident in the record have been categorized according to the types (or combination of types) of abusive incidents recorded, and cross-tabulated with the amount of repetition of abuse. This table shows that 185 families have only one type of abuse incident in their records. The largest number of families (N = 159) are those with only physical abuse incidents recorded. Two families have only

TABLE 5: Numbers of abuse incidents in families served by the abuse units during the period 1967-1976.

Number of Incidents	All Families Served		Families with at Least One Valid Citation		Families with at Least One Verified Incident	
	No.	%	No.	%	No.	%
0	39	11.9	-	-	-	-
1	97	29.6	92	35.4	95	33.2
2	82	25.0	71	27.3	81	28.3
3	28	8.5	24	9.2	28	9.8
4	29	8.9	26	10.0	29	10.1
5	14	4.3	13	5.0	14	4.9
6	8	2.4	7	2.7	8	2.7
7	6	1.8	4	1.5	6	2.1
8	5	1.6	5	1.9	5	1.7
9	4	1.2	4	1.5	4	1.4
10	1	.3	1	.4	1	0.4
11	6	1.8	5	1.9	6	2.1
12	1	.3	1	.4	1	0.4
13	2	.6	1	.4	2	0.7
14	1	.3	1	.4	1	0.4
15	1	.3	1	.4	1	0.4
16	1	.3	1	.4	1	0.4
17	3	.9	3	1.2	3	1.0
TOTAL	328	100.0	260	100.0	286	100.0

TABLE 6: Summary: Proportion of families with 0, 1 and more than 1 abuse incident

	All Families Served by Abuse Unit		Families with at Least One Valid Citation		Families with at Least One Verified Incident	
	No.	%	No.	%	No.	%
0 Incidents	39	11.9	-	-	-	-
1 Incident	97	29.6	92	35.4	95	33.2
More than 1 Incident	192	58.5	168	64.6	191	66.8
TOTAL	328	100.0	260	100.0	286	100.0

TABLE 7: Number of incidents per family during 1967-1976

a) Families with at least one valid citation (N = 260)

Number of Incidents	Families with Incidents of Physical Abuse		Families with Incidents of Emotional Abuse		Families with Incidents of Sexual Abuse		Families with Incidents of Neglect	
	No.	%	No.	%	No.	%	No.	%
0	23	8.8	222	85.4	234	90.0	189	72.7
1	112	43.1	30	11.5	18	6.9	39	15.0
2	60	23.1	6	2.3	1	.4	16	6.1
3	22	8.4	1	.4	5	1.9	7	2.7
4	12	4.6	1	.4	-	-	3	1.1
5	11	4.2	-	-	1	.4	2	.8
6	6	2.3	-	-	-	-	2	.8
7	3	1.2	-	-	1	.4	-	-
8	3	1.2	-	-	-	-	2	.8
9	2	.8	-	-	-	-	-	-
11	5	1.9	-	-	-	-	-	-
13	1	.4	-	-	-	-	-	-
TOTAL	260	100.0	260	100.0	260	100.0	260	100.0

TABLE 7: Number of incidents per family during 1967-1976

b) Families with at least one verified incident (N = 286)

Number of Incidents	Families with Incidents of Physical Abuse		Families with Incidents of Emotional Abuse		Families with Incidents of Sexual Abuse		Families with Incidents of Neglect	
	No.	%	No.	%	No.	%	No.	%
0	27	9.5	244	85.3	259	90.6	205	71.7
1	119	41.6	33	11.6	19	6.7	45	15.7
2	65	22.7	6	2.1	1	.3	18	6.2
3	26	9.1	1	.3	5	1.8	8	2.8
4	14	4.9	2	.7	-	-	3	1.1
5	13	4.5	-	-	1	.3	2	.7
6	7	2.4	-	-	-	-	2	.7
7	3	1.1	-	-	1	.3	-	-
8	3	1.1	-	-	-	-	3	1.1
9	2	.7	-	-	-	-	-	-
11	5	1.7	-	-	-	-	-	-
13	2	.7	-	-	-	-	-	-
TOTAL	286	100.0	286	100.0	286	100.0	286	100.0

TABLE 8: Number of incidents per family for each type or combination of types of abuse.

	Number of Incidents																	
	1		2		3		4		5		6-10		11-15		Over 15		Total	
	No.	Row %	No.	Row %	No.	Row %	No.	Row %	No.	Row %	No.	Row %	No.	Row %	No.	Row %	No.	% of Total
Physical (P)	74	46.5	51	32.1	12	7.5	9	5.7	6	3.8	5	3.1	2	1.3	-	-	159	55.6
Emotional (E)	2	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	.7
Sexual (S)	3	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1.0
Neglect (N)	10	47.6	7	33.3	3	14.3	1	4.8	-	-	-	-	-	-	-	-	21	7.4
P+E	3	11.5	3	11.5	4	15.4	6	23.1	3	11.5	5	19.3	2	7.7	-	-	26	9.1
P+S	-	-	4	30.7	3	23.1	3	23.1	1	7.7	1	7.7	1	7.7	-	-	13	4.6
P+N	3	7.5	14	35.0	5	12.5	8	20.0	2	5.0	6	15.0	2	5.0	-	-	40	14.0
S+N	-	-	-	-	-	-	-	-	-	-	-	-	1	100.0	-	-	1	0.3
P+E+S	-	-	-	-	1	50.0	-	-	-	-	-	-	-	-	1	50.0	2	0.7
P+S+N	-	-	2	28.6	-	-	-	-	-	-	1	14.3	1	14.3	3	42.8	7	2.4
P+E+N	-	-	-	-	-	-	1	9.1	2	18.2	6	54.5	2	18.2	-	-	11	3.9
P+E+S+N	-	-	-	-	-	-	1	100.0	-	-	-	-	-	-	-	-	1	0.3
% of TOTAL	95	33.2	81	28.3	28	9.8	29	10.1	14	4.9	24	8.4	11	3.9	4	1.4	286	100.0

emotional abuse incidents recorded (the children were locked in a dark place or threatened with physical violence, being sent away, or abandonment). Three families had only sexual abuse incidents recorded. Twenty-one families had only neglect (that was considered to be of abusive proportions). Of the 159 families with only physical abuse incidents (Table 9), 53.5% have more than one incident, and of those with only abusive neglect in their records, 52.4% have more than one incident in the record. The number of families with only emotional or sexual incidents in the records is small, and none of these have more than 1 incident in the record.

The second grouping of families in Table 9 includes those families with two types of abuse. There are 28.0% of the families with this grouping. The combination with the largest number of families is that of physical abuse and neglect (14.0%). Physical and emotional abuse is the next largest combination (9.1%); third is physical and sexual abuse (4.6%).

Table 9 also indicates families with three and four types of abuse. Three and eight tenths percent have the combination of physical, emotional, and neglect-type abuse.

While it is possible for two types of abuse to be recorded for one incident, it is more likely that separate incidents would be involved in the reporting of different types of abuse. For this reason, Table 9 gives the proportion of families with two types of abuse who have more than 2 incidents of abuse in the record. In this group, the proportion of repeaters is higher than the proportion of repeaters among those with only one type of abuse incident. Fifty-seven and five tenths percent of those with physical abuse and neglect have more than 2 incidents; 69.2% of those with physical and sexual abuse; and 76.9% of those with physical and emotional abuse. The one case with sexual abuse and neglect also had more than 2 incidents of abuse.

Among those families with three types of abuse incidents, Table 9 indicates that the proportion with more than 3 incidents is higher than the proportion with more than 1 incident among those families with one type of abuse: 71.4% of the families with physical, sexual and neglect incidents, and 100% of the eleven families with physical abuse, emotional abuse and neglect incidents.

TABLE 9: Repetition of abuse among families with different types and combinations of types of abuse incidents (N = 286)

Type of Abuse	More than 1 Incident N	%
Only Physical	85 (of 159)	53.5
Only Emotional	0 (of 2)	-
Only Sexual	0 (of 3)	-
Only Neglect	11 (of 21)	52.4
	$\bar{x}$	51.9
	More than 2 Incidents	
	N	%
Physical+Emotional	20 (of 26)	76.9
Physical + Sexual	9 (of 13)	69.2
Physical + Neglect	23 (of 40)	57.5
Sexual + Neglect	1 (of 1)	100.0
	$\bar{x}$	66.3
	More than 3 Incidents	
	N	%
Physical + Emotional + Sexual	1 (of 2)	50.0
Physical + Sexual + Neglect	5 (of 7)	71.4
Physical + Emotional + Neglect	11 (of 11)	100.0
	$\bar{x}$	85.0
	More than 4 Incidents	
	N	%
Physical + Emotional + Sexual + Neglect	0 (of 1)	0

(The one family with four types of abuse had 4 incidents in the record.) These figures suggest that the greater the variety of abusive treatment of children, the greater the likelihood of a chronic abuse situation in the family.

f. Do families who receive no valid citation have recurrent incidents?

Table 10 is a cross-tabulation of the number of valid citations received by a family with the number of incidents recorded in the case record for the family. One family which never received a validated citation had 6 abuse incidents mentioned in the record, and another such family had 7 abuse incidents in the case record.

There are 39 families among the 328 families served by the abuse units during the time period being assessed who have no abuse incidents. These include 38 families with invalidated citations and no other suspected abuse incidents mentioned in their records, 1 family which was a self-referral with no documented incident in the record. In addition, there were 3 families whose only recorded abuse incident was termed "accidental" on the citation although the citation was listed as "valid." For the purposes of future analyses, these families are considered to have no abuse incidents.

g. What proportion of perpetrators is involved in more than 1 citation?

Table 11a indicates that in the 260 families with at least one valid citation there are 362 perpetrators. These are perpetrators in the sense that they are associated with at least one verified incident of abuse. Seventy-nine (or 21.8%) of these perpetrators are not listed on a citation and 225 (or 62.2%) are listed on one citation. The remainder, 58 or 16%, have more than one citation for abuse. The largest number of citations received by one perpetrator was 5 (received simultaneously for abuse to 5 children in the family).

Table 11b shows that, among the 286 families with at least one incident of abuse, there are 404 perpetrators. Sixty-three perpetrators, or 15.6%, have more than one citation for abuse. (Not all of these would be valid citations.)

On the basis of citations received, approximately 85% of the perpetrators would not be described as repeaters of abuse.

TABLE 10: Cross-tabulation of number of incidents by number of citations.

Number of Citations	Number of Incidents									Total	Percent of Total
	0	1	2	3	4	5	6-10	11-15	16 +		
0	1	3	2	-	1	1	2	-	-	10	
Row %	10.0	30.0	20.0	-	10.0	10.0	20.0	-	-		3.1
1	38	93	51	17	15	7	14	6	4	245	
Row %	15.5	38.0	20.8	6.9	6.1	2.9	5.7	2.5	1.6		74.7
2	0	1	29	9	9	4	3	2	-	57	
Row %	-	1.7	50.9	15.8	15.8	7.0	5.3	3.5	-		17.4
3	-	-	-	2	2	2	3	1	-	10	
Row %	-	-	-	20.0	20.0	20.0	30.0	10.0	-		3.0
4	-	-	-	-	2	-	2	1	-	5	
Row %	-	-	-	-	40.0	-	40.0	20.0	-		1.5
5	-	-	-	-	-	-	-	1	-	1	
Row %	-	-	-	-	-	-	-	100.0	-		0.3
TOTAL	39	97	82	28	29	14	24	11	4	328	
% OF TOTAL	11.9	29.6	25.0	8.5	8.8	4.3	7.3	3.4	1.2		100.0

TABLE 11: Numbers of citations for perpetrators

a) Families with at least one valid citation (N = 260)

Number of Citations	Number of Perpetrators	%
0	79	21.8
1	225	62.2
2	44	12.2
3	12	3.3
4	-	-
5	2	0.5
TOTAL NO. OF PERPETRATORS	362	100.0

b) Families with at least one verified abuse incident (N = 286)

Number of Citations	Number of Perpetrators	%
0	98	24.3
1	243	60.2
2	48	11.9
3	13	3.2
4	1	0.2
5	1	0.2
TOTAL NO. OF PERPETRATORS	404	100.0

h. What proportion of perpetrators are involved in more than one abusive incident?

Table 12a indicates the numbers of perpetrators involved in the different numbers of abusive incidents. Among the 362 perpetrators in the 260 families with at least one valid citation, 175 or 48.3% were involved in more than one incident.

Among the 404 perpetrators (Table 12b) in the 286 families with at least one abusive incident, 197 or 48.8%, were involved in more than one incident.

Thus, based on the incidents of abuse recorded per perpetrator, approximately half the perpetrators repeat abusive behavior toward children, with the numbers of incidents per perpetrator being as high as 13.

In Table 13 the number of perpetrators per family is cross-tabulated with the number of abuse incidents recorded per family. According to the cross-tabulation which focuses on the 286 families (Table 13b), 51% of the 149 single perpetrator families have more than one incident of abuse recorded in the case record, while 87.5% of the 128 two perpetrator families have more than one incident recorded in the record. Fifty-seven and eight tenths percent of the two perpetrator families have more than two incidents recorded. It could be argued that two perpetrators are more likely to be identified in two separate incidents, thus the most appropriate figures to compare would be single perpetrator families with more than one incident and two perpetrator families with more than two incidents. Even in this comparison the two perpetrator families have almost 7% greater repetition of abuse than do single perpetrator families.

i. What proportion of abused children are targets of abuse more than once?

There were a total of 460 targets of abuse in the 260 families who had at least one valid citation. "Target" is used here in the sense that the child was involved in at least one verified abuse incident. Table 14 indicates that 306 or 66.5% of these children were named in citations, and 37 were named in more than one citation. This number is 8% of the total number of targets.

TABLE 12: Numbers of incidents per perpetrator in families

a) Families with at least one valid citation (N = 260)

Number of Incidents	Number of Perpetrators	%
0	-	-
1	187	51.7
2	78	21.5
3	39	10.8
4	25	6.9
5	11	3.0
6	8	2.2
7	4	1.1
8	2	0.6
9	3	0.8
10	-	-
11	3	0.8
12	1	0.3
13	1	0.3
TOTAL NO. OF PERPETRATORS	362	100.0

TABLE 12 : Numbers of incidents per perpetrator

b) Families with at least one verified abuse incident (N = 286)

Number of Incidents	Number of Perpetrators	%
0	-	-
1	207	51.2
2	89	22.0
3	44	10.9
4	28	7.0
5	11	2.7
6	9	2.2
7	4	1.0
8	2	0.5
9	3	0.8
10	1	0.2
11	3	0.8
12	2	0.5
13	1	0.2
TOTAL NO. OF PERPETRATORS	404	100.0

TABLE 13: Cross-tabulation of number of perpetrators for the family by number of incidents for the family

a) Families with at least one valid citation (N = 260)

Number Perpetrators	Number of Incidents 1	2	3	4	5	6-10	11-17	Row Total	Percent of Total
Perpetrator(s) unknown	8	3	1	-	-	-	-	12	4.6
Row percent	66.7	25.0	8.3	-	-	-	-	100.0	-
One	69	33	11	7	4	7	2	133	51.2
Row percent	51.8	24.8	8.3	5.3	3.0	5.3	1.5	100.0	-
Two	15	35	12	19	9	14	11	115	44.2
Row percent	13.1	30.4	10.4	16.5	7.8	12.2	9.6	100.0	-
Total	92	71	24	26	13	21	13	260	100.0
Percent of Total	35.4	27.3	9.2	10.0	5.0	8.1	5.0	100.0	-

b) Families with at least one verified abuse incident (N = 286)

Perpetrator(s) unknown	6	2	1	-	-	-	-	9	3.1
Row percent	66.7	22.2	11.1	-	-	-	-	100.0	-
One	73	41	13	8	4	8	2	149	52.1
Row percent	49.0	27.5	8.7	5.4	2.7	5.4	1.3	100.0	-
Two	16	38	14	21	10	16	13	128	44.8
Row percent	12.5	29.7	10.9	16.4	7.8	12.5	10.2	100.0	-
Total	95	81	28	29	14	24	15	286	100.0
Percent of total	33.2	28.3	9.8	10.1	4.9	8.4	5.3	100.0	-

TABLE 14: Number of citations per target among families with at least one valid citation (N = 260)

Number of Citations	Number of Targets	%
0	154	33.5
1	269	58.5
2	31	6.7
3	5	1.1
4	1	0.2
TOTAL	460	100.0

j. What proportion of abused children have repeated citations for specific types of abuse?

When specific types of abuse are considered (see Table 15), the numbers of repeated citations for a single target are lower. Among children who were physically abused, 5.7% are the objects of repeated physical abuse. No children were identified by citations as involved in repeated emotional abuse or sexual abuse. Only 4 children were identified as targets of neglect a second time.

k. What proportion of targets of abuse are involved in more than one incident?

When the criterion of repeated abuse toward a child is the number of incidents involving a particular child as opposed to the number of citations involving a particular child, the amount of repeated abuse toward a child is higher. Table 16a indicates that 222 or 48.3% of the children in the 260 families with a valid citation are targets of abuse more than once. One hundred five children or 22.8% of the total 460 are targets of abuse 3 or more times.

Among the 286 families with at least one abuse incident in the record (Table 16b), there are 511 targets; 50.5% of these were involved in one incident and 49.5% were involved in more than one incident. One hundred twenty children or 23.5% were targets of abuse more than twice.

l. What proportion of targets are involved in more than one incident of a specific type of abuse?

When physical abuse is selected out (Table 17), 123 children were the objects of repeated abuse. This number is 34% of children who are the objects of physical abuse. When targets of emotional abuse are involved 9 (13.4%) are indicated as having repeated incidents. Among the 37 children who are the objects of sexual abuse, 12 (32.4%) are involved in repeated incidents. There were 134 children involved in neglect. Of this number 40 (29.9%) were the objects of repeated neglect.

Thus, approximately one-half of the child targets of abuse suffer repeated abuse and approximately one-third or fewer of the targets who suffer physical or sexual abuse or abusive neglect are targets of the same kind of abuse at least once more.

TABLE 15: Number of citations per target for specified types of abuse among families with at least one valid citation (N = 260)

Physical Abuse		
Number of Citations	Number of Targets	%
0	198	43.0
1	236	51.3
2	22	4.8
3	3	.7
4	1	0.2
TOTAL	460	100.0

Sexual Abuse		
Number of Citations	Number of Targets	%
0	449	97.6
1	11	2.4
2	-	-
3	-	-
4	-	-
	460	100.0

Emotional Abuse		
Number of Citations	Number of Targets	%
0	459	99.8
1	1	.2
2	-	-
3	-	-
4	-	-
TOTAL	460	100.0

Neglect		
Number of Citations	Number of Targets	%
0	426	92.6
1	30	6.5
2	4	.9
3	-	-
4	-	-
	460	100.0

TABLE 16: Numbers of incidents per target

a) In families with at least one valid citation (N = 260)

Number of Incidents	Number of Targets	%
1	238	51.7
2	117	25.5
3	57	12.4
4	19	4.1
5	11	2.4
6	11	2.4
7	2	0.4
8	3	0.7
9	-	-
10	-	-
11	1	0.2
12	1	0.2
TOTAL	460	100.0

TABLE 16: Numbers of incidents per target

b) In families with at least one valid incident
(N = 286 families)

Number of Incidents	Number of Targets	%
1	258	50.5
2	133	26.0
3	64	12.5
4	24	4.7
5	11	2.2
6	12	2.3
7	4	0.8
8	3	0.6
9	-	-
10	-	-
11	1	.2
12	1	.2
TOTAL	511	100.0

TABLE 17: Number of incidents by number of targets involved in specific types of abuse for families with at least one valid citation (N = 260)

Number of Incidents	Physical Abuse		Sexual Abuse	
	Number of Targets	Percent	Number of Targets	Percent
0	99	21.5	423	92.0
1	238	51.7	25	5.4
2	78	17.0	9	2.0
3	28	6.0	2	.4
4	8	1.7	-	-
5	5	1.1	1	.2
6	1	.3	-	-
7	2	.4	-	-
8	1	.3	-	-
TOTAL	460	100.0	460	100.0

Number of Incidents	Emotional Abuse		Neglect	
	Number of Targets	Percent	Number of Targets	Percent
0	393	85.4	326	70.9
1	58	12.6	94	20.4
2	8	1.7	21	4.6
3	1	.3	8	1.7
4	-	-	2	.5
5	-	-	7	1.5
6	-	-	1	.2
7	-	-	-	-
8	-	-	1	.2
TOTAL	460	100.0	460	100.0

2. Recidivism

In the preceding sections the focus was on "recurrence" -- that is, any incident of repeated abuse. Such a focus is important for understanding what happens to an abused child. It does not accurately reflect on the effect of the efforts to prevent further abuse, since a further incident may occur shortly after services are initiated and before they can have an effect. To examine this question of recurrence after services have been rendered, a different definition was employed. An incident of abuse occurring after the case was closed is what we term here "recividism." At issue is the case opening in which the first citation is received. This is important since there were more than a few instances of families having had their cases opened and closed prior to the opening in which the first citation was received.

a. What proportion of the families received a second citation after the case had been closed following the first citation?

Table 18 indicates that 68 families of the 260 families with a valid citation had not had their cases closed at the time of the case record coding. Of the 192 families whose cases had been closed, 21 received one or more citations following the closing of the case. These 21 families represent just slightly over 10% of the families who had the potential for becoming "recidivists" in this narrow sense of the term.

b. What proportion of the families have another incident of abuse occurring after the case has been closed following the first citation?

Table 19 indicates the number of incidents recorded after the closing of the case. Of the 260 validly cited families, 192 had their cases closed following completion of services for the first citation of abuse. Seventy-three (38%) of these families had their cases reopened, and in 37 of these families (50.1%) at least one more incident of abuse is described in the case record.

Among the 286 families with an incident of abuse in their record, 206 had their cases closed. Eighty-four of these had their cases reopened after they had been closed (40.8%). Of the 84 families, 38 (45.2%) had at least one more

TABLE 18: Number of citations received per family after case closing

Case Status	Families With at Least One Valid Citation (N = 260)		Families With at Least One Verified Incident (N = 286)	
	No.	% of Closed Cases	No.	% of Closed Cases
Case not closed	68		80	
Case closed, no re-citation	171	89.1	185	89.8
Case closed, re-citation	21	10.9	21	10.2
TOTAL	260	100.0	286	100.0
Case Closed, re-citation				
1 Citation	17		17	
2 Citation	4		4	
TOTAL	21		21	

TABLE 19: Abuse incidents in families after case closing and reopening

	Families with at Least One Valid Citation		Families with at Least One Verified Incident	
	No. of families	% of closed cases	No. of families	% of closed cases
Case still open	68		80	
Case closed, not reopened	119	62.0	122	59.2
Case closed, reopened no abuse	36	18.7	46	22.3
Case closed, reopened abuse	37	19.3	38	18.5
TOTAL	260	100.0	286	100.0

Number of Incidents	Case Reopened		Case Reopened	
	No. of families	Percent	No. of families	Percent
0	36	49.3	46	54.8
1	23	31.5	24	28.6
2	4	5.5	4	4.8
3	3	4.1	3	3.5
4	2	2.7	2	2.4
5	3	4.1	3	3.5
6	1	1.4	1	1.2
13	1	1.4	1	1.2
TOTAL	73	100.0	84	100.0

incident of abuse recorded during the reopening(s) following the opening and closing during which the first citation had been received.

Thus more than 1/3 of the cases were reopened after they had been closed. Close to half of the cases which were reopened had at least one more incident of abuse recorded in the case record. These families represent close to one-fifth of the closed cases.

c. How many perpetrators were re-cited after the case had been closed?

Table 20 indicates the number of perpetrators who were cited again after the case was closed; 7.8% of the 255 perpetrators in families with at least one valid citation whose cases had been closed were cited for abuse after the case was closed. The comparable percentage among the 286 families with at least one abuse incident was 7.2%.

d. How many perpetrators had incidents of abuse recorded after the case had been closed?

In order to have documentation of further abuse incidents in the case record, a family's case would have to have been reopened after it had been closed (see Table 21). Among the 260 families with at least one valid citation, 104 of the perpetrators were tied to cases which were reopened. The 44 perpetrators with another abusive incident after the case had been closed represent 12.2% of the total 362 perpetrators in the 260 families, 17.3% of the 255 perpetrators whose cases had been closed, and 42.3% of the 104 perpetrators of cases which were reopened.

Among the perpetrators in the 286 families with at least one abuse incident, the cases of 120 were reopened. These represent 43% of the 279 perpetrators whose cases had been closed. Of these 120 perpetrators whose cases were reopened, 45 or 37.5% had at least one more abuse incident recorded in the case record. These 45 thus represent 16.1% of those 279 perpetrators whose cases had been closed, and 11.1% of the 404 perpetrators in the 286 families.

TABLE 20: Number of perpetrators who were cited after case closing

Number of Citations After Case Closing	Families with at Least One Valid Citation		Families with at Least One Verified Incident	
	No.	%	No.	%
0	235	92.2	259	92.8
1	18	7.0	18	6.5
2	2	0.8	2	0.7
Sub-total	255	100.0	279	100.0
Perpetrators in cases still open	107		125	
TOTAL	362		404	

TABLE 21: Number of incidents per perpetrator occurring after case closing and reopening

Number of Incidents	Perpetrators in Families with at Least One Valid Citation			Perpetrators in Families with at Least One Abuse Incident		
	No.	% of Perps. in Closed Cases	% of Perps. in Reopened Cases	No.	% of Perps. in Closed Cases	% of Perps. in Reopened Cases
0	60	23.5	57.7	75	26.9	62.5
1	28	11.0	26.9	29	10.4	24.1
2	7	2.7	6.8	7	2.5	5.8
3	5	2.0	4.8	5	1.8	4.2
4	2	0.8	1.9	2	0.7	1.7
5	2	0.8	1.9	2	0.7	1.7
	104	40.8	100.0	120	43.0	100.0
		(N = 255)	(N = 104)		(N = 279)	(N = 120)

e. How many children were involved in citations after the first citation case closing?

Table 22a indicates the occurrence of citations after the first citation case closing. Of the 460 targets in the group of families with at least one valid citation, 319 were members of families whose cases had been closed. Of these 319, 26 children were cited as targets of abuse after the case had been closed after the first citation. They represent 8.1% of those whose family cases had been closed, or 5.7% of the total target population in this group.

In Table 22b, 26 of the targets of families with at least one abuse incident were cited for abuse after the case had been closed. These 26 represent 5.1% of the total group of 511 targets in these families, or 7.6% of the 344 targets whose families' cases had been closed prior to this re-citation.

f. What proportion of targets are involved in abuse incidents after the first citation case closing?

Among those 260 families with a valid citation whose cases were re-opened, 59 children were abuse targets after the case was reopened (see Table 23a). These 59 children represent 12.8% of the total number of targets in the 260 families, or 18.5% of the 319 targets of families whose cases had been closed.

Among the group of 286 families with at least one incident of abuse in the record, 60 targets were involved in incidents of abuse after the citation one case closing. These 60 targets represent 11.7% of the total 511 targets in these families, or 17.4% of the 344 targets in families whose cases had been closed (Table 23b).

3. Abuse prior to citation*

a. Had abuse occurred in or related to the family prior to citation?

Table 24a indicates the number of occurrences of abuse prior to the first citation. In approximately one-third of the cases, prior abuse (before the time of the first citation) is known to have occurred. Thus, the first citation actually represents a repetition of abuse for one third of

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* It should be noted that some "prior abuse" occurred before the current system of abuse citations was instituted thus could not involve a citation.

TABLE 22: Targets involved in abuse citations after first citation case closing

a) Families with at least one valid citation (N = 260)

Number of Citations	Number of Targets	%
0	293	91.9
1	24	7.5
2	2	0.6
TOTAL	319	100.0

b) Families with at least one verified abuse incident (N = 286)

Number of Citations	Number of Targets	%
0	318	92.4
1	24	7.0
2	2	0.6
TOTAL	344	100.0

TABLE 23: Targets involved in abuse incidents after first citation case closing

a) Families with at least one valid citation (N = 260)

Number of Incidents	Number of Targets	% of Targets in Closed Cases	% of Targets in Reopened Cases
0	92	28.8	60.0
1	41	12.9	27.1
2	11	3.4	7.3
3	5	1.6	3.3
4	-	-	-
5	1	0.3	0.7
12	1	0.3	0.7
Sub-total	151	47.3	100.0
		(N = 319)	(N = 151)
Number of targets where no reopening	168		
Sub-total	319		
Number of targets where case not closed	141		
TOTAL	460		

b) Families with at least one verified incident of abuse (N = 286)

Number of Incidents	Number of Targets	% of Targets in Closed Cases	% of Targets in Reopened Cases
0	108	31.4	64.3
1	42	12.2	25.0
2	11	3.2	6.5
3	5	1.4	3.0
4	-	-	-
5	1	0.3	0.6
12	1	0.3	0.6
Sub-total	168	48.8	100.0
		(N = 344)	(N = 168)
Number of targets where no reopening	176		
Number of targets where case not closed Sub-total	344		
Number of targets where case not closed	167		
TOTAL	511		

TABLE 24: Occurrence of abuse in the family prior to first citation

a) For all types of abuse

Was There Abuse Prior to First Citation?	Families with at Least One Valid Citation		Families with at Least One Verified Incident of Abuse	
	No.	%	No.	%
No	169	65.0	178	62.2
Yes	91	35.0	99	34.6
No Answer	-	-	9	3.2
TOTAL	260	100.0	286	100.0

b) By specific type of abuse (families with at least one valid citation N = 260)

Was There Abuse Prior to First Citation?	Physical Abuse		Emotional Abuse		Sexual Abuse		Neglect	
	No.	%	No.	%	No.	%	No.	%
No	195	75.0	247	95.0	249	95.8	229	88.1
Yes	65	25.0	13	5.0	11	4.2	31	11.9
No Answer	-	-	-	-	-	-	-	-
TOTAL	260	100.0	260	100.0	260	100.0	260	100.0

the families. The prior abuse includes neglect as well as physical, emotional, and sexual abuse, with the preponderance of incidents being physical abuse incidents (Table 24b).

b. Had the perpetrator been involved in abuse prior to the first citation for the family?

Table 25 indicates the number of perpetrators involved in abuse prior to the first citation for the family. Thirty percent of the perpetrators in the group with at least one valid citation were involved in a prior incident of abuse. Table 26 indicates prior abuse by perpetrator according to specific type of abuse.

c. Had the target child been involved in abuse prior to the first citation for the family?

Table 27 indicates the number of children who had been involved in abuse incidents prior to the family's first citation; 37.4% of the targets in the group with at least one validated citation were targets of abuse prior to the time of the first citation. Table 28 indicates prior abuse of targets by specific type of abuse.

d. What is the relationship between the occurrence of prior abuse and selected variables?

The existence of prior abuse noted in the record has been touched on with respect to its correlations with a variety of the dimensions reviewed so far. Table 29 summarizes some of these findings. The amount of physical abuse known to have occurred before the first citation is significantly related to the likelihood of the first citation's being judged a valid citation ($r = .16$, $p \leq .01$).

Also, as was noted earlier,the presence of abuse in the family prior to the first citation is associated with the tendency for children to have been placed for protection from abuse ($r = .13$, $p \leq .05$), and for other reasons ($r = .27$, $p \leq .01$) (See Table 30).

TABLE 25: Abuse by perpetrator prior to first citation for the family.

Was There Abuse Prior to 1st Citation?	Families with at Least One Valid Citation	
	Number of Perpetrators	%
No	253	70.0
Yes	109	30.0
TOTAL	362	100.0

TABLE 26: Abuse by perpetrator prior to family's first citation by specific type of abuse

Was There Abuse Prior to First Citation?	Physical Abuse No.	Physical Abuse %	Emotional Abuse No.	Emotional Abuse %
No	297	82.0	351	97.0
Yes	65	18.0	11	3.0
TOTAL	362	100.0	362	100.0

Was There Abuse Prior to First Citation?	Sexual Abuse No.	Sexual Abuse %	Neglect No.	Neglect %
No.	351	97.0	319	88.1
Yes	11	3.0	43	11.9
TOTAL	362	100.0	362	100.0

TABLE 27: Abuse of targets prior to first citation for the family

Was There Abuse Prior to First Citation?	Number of Targets	%
No	288	62.6
Yes	172	37.4
TOTAL	460	100.0

TABLE 28: Abuse of targets prior to family's first citation by specific type of abuse

Was There Abuse Prior to First Citation?	Physical Abuse		Emotional Abuse	
	No.	%	No.	%
No	360	78.3	432	93.9
Yes	100	21.7	28	6.1
TOTAL	460	100.0	460	100.0

Was There Abuse Prior to First Citation?	Sexual Abuse		Neglect	
	No.	%	No.	%
No	439	95.4	405	88.0
Yes	21	4.6	55	12.0
TOTAL	460	100.0	460	100.0

TABLE 29: Correlations between the presence of abuse prior to the first citation for abuse and indices of recurrence (N = 318 families)

	Any type of prior abuse	Prior Physical Abuse	Prior Emotional Abuse	Prior Sexual Abuse	Prior Gross Neglect
Status of Citation 1	.20**	.16**	.10	.09	.10
Number of all citations	.00	.00	.00	-.06	.00
Number of citations for physical abuse	.10	.09	.13*	-.05	.00
Number of citations for emotional abuse	.08	.10	-.01	-.01	-.01
Number of citations for sexual abuse	-.02	.01	-.03	.04	-.05
Number of citations for neglect	.00	-.03	-.04	-.03	.14*
Number of all incidents of abuse @	.54**	.49**	.23**	.33**	.38**
Number of incidents of physical abuse@	.45**	.52**	.14*	.12*	.13*
Number of incidents of emotional abuse @	.27**	.12*	.63**	.04	.03
Number of incidents of sexual abuse @	.24**	.17**	.02	.64**	.13*
Number of incidents of neglect @	.27**	.12*	-.04	.09	.60**

* $p \leq .05$

** $p \leq .01$

@Note: Any variable involving "number of incidents" includes one incident of prior abuse. It is never more than one because the only information available regarding prior abuse was whether it occurred or not . These correlations should be interpreted with this bias in mind.

TABLE 30: Correlations between occurrence of prior abuse and placement of child (N = 318 families)

	Placement for Abuse	Placement for Other Reasons
Occurrence of all prior abuse	.13*	.27**
Occurrence of prior physical abuse	.17**	.14*
Occurrence of prior emotional abuse	-.07	.14*
Occurrence of prior sexual abuse	.05	.15**
Occurrence of prior neglect	.12*	.26**

* $p \leq .05$

** $p \leq .01$

4. Multiple citations and incidents

Table 31 indicates the number of families with a valid citation that had citations or incidents involving more than one target simultaneously. Fifteen or 5.8% of the 260 families were cited for abuse toward more than one child at the time of the first citation. In 3 additional families, abusive behavior toward more than one child at the time of citation 1 was described but not included in the citation. These 18 families represent 6.9% of the 260 families with a valid citation.

Table 31 also indicates the number of the 260 families in which there were multiple citations after the first citation. One family was subsequently cited (after the first citation closing) for abuse toward more than one child simultaneously. However, the records of 23 families indicate subsequent abusive behavior toward more than one child at the same time.

For the largest proportion of families, one child is a target of abuse at any one time.

5. Time elapsed between citations and/or incidents

As Table 32 indicates, the number of months which elapsed from citation 1 to citation 2 for the 55 families with 2 citations (when this information is known) ranges from 1 to over 67 months. Forty-three and six tenths percent of the second citations occur within the first year after the first citation, and 29.1% occur within the second year after the first citation.

If the incident of abuse following citation 1 is looked at in a time frame relative to citation 1, regardless of whether this incident is a cited one or not, an even larger proportion (57.1%) occurs in the first year following citation 1 than occurs after the first year (see Table 33). This time frame would suggest that service provision in abuse cases might be maintained for a minimum of one year after the first citation. To do this would provide service during this high risk for repeated abuse period.

For the 22 families who have a citation after the citation 1 closing, where the time frame is known, the number of months elapsing from the first citation closing to the next citation ranges from 1 to 61 months. Table 34 indicates that 59.1% of these second citations occur in the first year after the closing. Seventy-seven and three tenths percent of the next citations (after citation 1 closing) occur in the first two years after the closing.

TABLE 31: Families with multiple citations and incidents (N = 260)

	Multiple Citations at Citation One		Multiple Incidents at Citation One	
	No.	%	No.	%
No	245	94.2	242	93.1
Yes	15	5.8	18	6.9
TOTAL	260	100.0	260	100.0

	Multiple Citations After Citation One		Multiple Incidents After Citation One	
	No.	%	No.	%
No	259	99.6	237	91.2
Yes	1	.4	23	8.8
TOTAL	260	100.0	260	100.0

TABLE 32: Time from first citation to later citation

Time (months)	Number of Families with at Least One Valid Citation	Percent of the 260 Families	Percent of the 55 Families with Later Citations
1 - 6	17	6.5	30.9
7 - 12	7	2.7	12.7
13 - 18	10	3.8	18.2
19 - 24	6	2.3	10.9
25 - 30	4	1.5	7.3
31 - 36	3	1.2	5.5
37 - 42	3	1.2	5.5
43 - 48	1	.4	1.8
49 - 54	0	-	-
55 - 60	0	-	-
61 - 66	2	.8	3.6
67+	2	.8	3.6
No later citation	205	78.8	-
TOTAL	260	100.0	100.0

TABLE 33: Time from first citation to later incident

Time (months)	Number of Families with at Least One Valid Citation	Percent of the 260 Families	Percent of the 105 Families with Later Incidents
1 - 6	47	18.0	44.7
7 - 12	13	5.0	12.4
13 - 18	17	6.5	16.2
19 - 24	8	3.1	7.6
25 - 30	8	3.1	7.6
31 - 36	2	.8	1.9
37 - 42	5	1.9	4.7
43 - 48	0	-	-
49 - 54	2	.8	1.9
55 - 60	1	.4	1.0
61 - 66	1	.4	1.0
67+	1	.4	1.0
No later incident	155	59.6	-
TOTAL	260	100.0	100.0

TABLE 34: Time from citation 1 closing to the next citation

Time (months)	Number of Families with at Least One Valid Citation	Percent of the 260 Families	Percent of the 22 Families Having Next Citation (N=22)
1 - 6	9	3.5	40.9
7 - 12	4	1.5	18.2
13 - 18	4	1.5	18.2
19 - 24	0	-	-
25 - 30	0	-	-
31 - 36	2	.8	9.1
37 - 42	0	-	-
43 - 48	1	.4	4.5
Over 48	2	.8	9.1
No citation after closing	238	91.5	-
TOTAL	260	100.0	100.0

Looking at the time frame for the next abusive incident (regardless of whether or not it was cited) after the citation 1 closing, Table 35 indicates that 63.2% occur in the first year after the citation 1 closing, and 89.5% occur in the first 2 years after the citation 1 closing.

6. Frequency of deaths due to abuse

Table 36 indicates that deaths due to abuse are relatively rare in the 260 families with a valid citation. Among the four families with deaths known to be due to abuse, two families had two deaths. These six deaths represent less than 2% of the 460 targets in the families with a valid citation.

7. Frequency of "accident" listed as reason for abuse

Table 37 indicates the rarity of abuse citations where "accident" was coded as the reason for abuse: 17 cases of the 349 citations in families with at least one valid citation.

8. Children as targets of abuse

a. How many children in a family are targets of abuse?

Forty-five and four tenths percent of the 260 families had at least 2 targets. Twenty percent of these families had at least 3 targets. Eleven and five tenths percent of these families had at least 4 targets. Thus, almost one-half of the 260 families had more than one child as targets of abuse (see Table 38).

b. At the time of the family's first incident, what are the ages of children who are at any time targets of abuse?

Table 39 indicates that, for the 460 targets in the families with a valid citation, the greatest proportion (63%) are in the youngest age range, of 0-5 years, 11 months. The next most common age range (23.9%) of targets is 6 years to 11 years, 11 months. The lowest number (12.8%) falls into the oldest age range, of 12 to 18 years of age.

c. How many abused children are put into foster placement?

Table 40 indicates that, of the 260 families with at least one valid citation, 48.5% had children placed outside the nuclear family for protection from abuse.

Table 41 indicates that in 45.4% of the 260 families, placement occurred for reasons other than protection of the child from abuse. There is overlap between these families and families where placement for other reasons occurred, i.e., a family could have had placement for both types of reasons.

TABLE 35: Citation 1 closing to next incident

Time (months)	Number of Families with at Least One Valid Citation	Percent of the 260 Families	Percent of the 38 Families Having Next Incidents (N=38)
1 - 6	18	6.9	47.4
7 - 12	6	2.3	15.8
13 - 18	7	2.7	18.4
19 - 24	3	1.1	7.9
25 - 30	0	-	-
31 - 36	1	.4	2.6
37 - 42	0	-	-
43 - 48	1	.4	2.6
Over 48	2	.8	5.3
No incident after closing	222	85.4	
TOTAL	260	100.0	100.0

TABLE 36: Families in which deaths occurred due to abuse (N = 260)

	Frequency	Percent
Child not dead	255	98.1
Child dead	4	1.5
No answer	1	.4
TOTAL	260	100.0

TABLE 37: Families in which targets of abuse are associated with "accident" citations (N = 260)

Number of Accident Citations	Target 1 No.	Target 1 %	Target 2 No.	Target 2 %	Target 3 No.	Target 3 %	Target 4 No.	Target 4 %
0	249	95.8	116	44.6	52	20.0	29	11.1
1	8	3.1	2	.8	-	-	1	.4
2	3	1.1	-	-	-	-	-	-
No such target in family	-	-	142	54.6	208	80.0	230	88.5
TOTAL	260	100.0	260	100.0	260	100.0	260	100.0

TABLE 38: Numbers of target children in families

a) Number of target children in families with at least one valid citation (N = 260)

Number of Targets	Number of Families	Percent
1	142	54.6
2	66	25.4
3	22	8.5
4	30	11.5
TOTAL	260	100.0

b) Number of target children in families with at least one verified abuse incident (N = 286)

Number of Targets	Number of Families	Percent
1	153	53.5
2	74	25.9
3	26	9.1
4	33	11.5
TOTAL	286	100.0

TABLE 39: Age of children who were targets of abuse at time of first incident for the family (N = 260)

Age	Target 1 No.	Target 1 %	Target 2 No.	Target 2 %	Target 3 No.	Target 3 %	Target 4 No.	Target 4 %
(0-5 yr)	147	56.5	72	27.7	41	15.7	30	11.5
(6-11 yr)	67	25.8	35	13.5	8	3.1	-	-
(12-17 yr)	46	17.7	11	4.2	2	.8	-	-
No such target or unknown age	-	-	142	54.6	209	80.4	230	88.5
TOTAL	260	100.0	260	100.0	260	100.0	260	100.0

TABLE 40: Number of families in which there was placement of the child due to abuse (N = 260)

Was There Placement Due to Abuse?	Number of Families	Percent
No	134	51.5
Yes	126	48.5
TOTAL	260	100.0

TABLE 41: Number of families in which there was placement of the child due to reasons other than abuse (N = 260)

Was There Placement for Reasons Other Than Abuse?	Number of Families	Percent
No	142	54.6
Yes	118	45.4
TOTAL	260	100.0

Table 42 indicates that 22.3% of the 260 families with a valid citation experienced placement of one or more children before the time of the first citation. Thus, 32% of the families who had placements at all experienced placement before the first citation. For 35% of the 260 families, the first placement occurred at the time of the first citation (50.3% of the families who had any placements). For 12.3% of the families, the first placement occurred after the first citation (17.7% of the families who had any placements).

d. What is the correlation between number of incidents and placement of children?

Table 43 indicates that for the 260 families with a valid citation the placement of children outside the home by the child welfare agency is positively correlated with the number of incidents in each category of abuse: total number of physical abuse incidents is correlated with placement for protection from abuse ($r = .23$, $p \leq .01$);placement for other reasons is positively correlated with numbers of physical abuse incidents ($r = .14$, $p \leq .05$), with numbers of emotional abuse incidents ($r = .20$, $p \leq .01$), with numbers of sexual abuse incidents ($r = .10$, n.s.), and with numbers of neglect incidents ($r = .27$, $p \leq .01$). Thus, families who abuse their children are evidently also experiencing other problems which necessitate removal of the children from the home and their placement in foster care.

9. The relationship between the number of incidents and different types of abuse

Table 44 indicates that for the 260 validly cited families the number of physical abuse incidents for a family is significantly and positively related to the number of emotional abuse incidents for the family ($r = .29$, $p \leq .01$), and the number of sexual abuse incidents for the family ($r = .13$, $p \leq .05$). The number of sexual abuse incidents for the family is related not only to the frequency of physical abuse of children, but also to the number of incidents of neglect of the children ($r = .18$, $p \leq .01$).

These significant intercorrelations highlight the fact that the categories of abuse are related, and that the trauma for the children in a family is not encompassed by talking only about the physical injury observed, or the sexual attack reported. Families who abuse children in one way are also likely to abuse children in another way, and on more than one occasion (each category of abuse correlates positively with the total number of incidents for the family at the .001 level).

TABLE 42: Number of families by time of first placement

	Number of Families	Percent
Before 1st citation	58	22.3
At time of 1st citation	91	35.0
After 1st citation	32	12.3
No placements	79	30.4
TOTAL	260	100.0

TABLE 43: Correlations between number of incidents and placement of children (N = 260)

	Placement for Abuse	Placement for Other Reasons
Number of abuse incidents	.18**	.28**
Number of physical abuse incidents	.23**	.14*
Number of emotional abuse incidents	.01	.20**
Number of sexual abuse incidents	.01	.10
Number of neglect incidents	.00	.27**

* $p \leq .05$

** $p \leq .01$

TABLE 44: Intercorrelation of numbers of incidents of each type of abuse (N = 260 families)

	Number of Physical Abuse Incidents	Number of Emotional Abuse Incidents	Number of Sexual Abuse Incidents	Number of Neglect Incidents
Number of physical abuse incidents	1.00			
Number of emotional abuse incidents	.29**	1.00		
Number of sexual abuse incidents	.13*	-.06	1.00	
Number of neglect incidents	.08	.01	.18**	1.00

* $p \leq .05$

** $p \leq .01$

10. Family conflict involving adults

The case records of each family were coded for all conflict events. In the results described below, the incidents of conflict involving adult family members as victims were analyzed, and correlated with the several indices of recurrence of child abuse.

a. What is the frequency of different types of conflict involving adults?

Table 45 lists the frequency of occurrence of incidents of conflict within the 328 families where an adult family member was the object or victim. As can be seen in Table 45, the most frequently occurring methods included: beatings (which left bruises), threats to kill, assaults and threats of harm.

In Table 46, the number of different conflict methods involving adult family members is indicated for the 328 families. In Table 47, the different numbers of conflict incidents involving adult family member victims is listed. Almost half of the 328 child abusive families in this study have at least one incident of serious adult conflict recorded in the case record, and over half of this latter group has more than one such incident described.

b. What is the relationship between the recurrence of child abuse and other types of family conflict?

Table 48 contains the correlations between the child abuse recurrence indices and (a) over-all number of types of conflicts with adult family members as victims, (b) number of abusive incidents with adult family member as victims, and (c) number of abusive methods toward adult family members. While the correlations between number of citations received by the family and the two adult abuse indices were positive but not significant, there are substantial positive correlations between the remaining three indices of child abuse repetition and the adult abuse indices: the greater the frequency of child abuse, the greater the frequency of adult abuse, and the greater the variety of abusive methods used toward adults.

These results clearly suggest that repetition of abuse toward children occurs in a climate of general family violence in which the children are not the sole victims of aggression.

TABLE 45: Number of different types of incidents occurring to adults in families studied (N = 328)

	Number of recorded occurrences						No. Families	Percent of All Families (328)
	1	2	3	4	5	6+		
Isolation in a dark room/closet	1						1	0.3
Lock out of house/kick out	5		1				6	1.8
Shout, swear at	7	2		1			10	3.1
Ridicule	2						2	0.6
Embarrass	2						2	0.6
Take possessions away	1						1	0.3
Threaten to hit	3	1					4	1.2
Threaten to leave	8						8	2.4
Threaten to put away	1						1	0.3
Slap face	3						3	0.9
Slap	10	3	1				14	4.3
Shake	1						1	0.3
Pull hair	3						3	0.9
Hit with stick or hard object	6						6	1.8
Beat (leave bruises)	49	10	6	5	2	3	75	22.9
Burn	1						1	0.3
Push, throw around	11	1					12	3.7
Punch	9						9	2.8
Sexual abuse, rape	5		1				6	1.8
Physical neglect		1					1	0.3
Shoot gun at	3						3	0.9
Choke, strangle	7						7	2.1
Fight	6	2					8	2.4
Attempt use of knife, hatchet	5						5	1.6
Suicide	3						3	0.9
Kick	8	1					9	2.8
Use of drugs	1						1	0.3
Grab limb	3						3	0.9
Stab	5						5	1.6
Attempt suicide	12	2		2			16	4.9
Put hand through glass	3						3	0.9
Pin pricks, fork puncture	1						1	0.3
Threaten to kill	12	6	1	1			20	6.1
Pinch	1						1	0.3
Throw objects at	8						8	2.4
Scratch	3						3	0.9
Abusing allegation	19	1					20	6.1
Assault	10	7	3				20	6.1
Threaten to harm	13			1			14	4.3
Threaten to shoot	3						3	0.9
Attempt to kill	1						1	0.3

TABLE 46: Number of different abusive methods used toward adult family members (N = 328 families)

Number of Types of Abusive Methods	Number of Families	Percent
0	185	56.4
1	80	24.4
2	30	9.2
3	23	7.0
4	4	1.2
5	3	.9
6	1	.3
8	1	.3
11	1	.3
TOTAL	328	100.0

TABLE 47: Number of abusive incidents in which an adult family member was a victim (N = 328 families)

Number of Incidents	Number of Families	Percent
0	185	56.4
1	65	19.8
2	28	8.6
3	20	6.1
4	9	2.8
5	8	2.4
6	4	1.2
7	2	.6
8	4	1.2
9	1	.3
12	1	.3
17	1	.3
TOTAL	328	100.0

TABLE 48. Correlations between indices of child abuse recurrence and indices of conflict with adult family members as victims

	Total No. Citations (N = 328)	Total No. Child Abuse Incidents (N = 328)	Citations After 1st Closing (N = 242)	Incidents After 1st Closing (N = 90)
No. types of conflict (abusive and non-abusive methods) Adult Family Members as Victims	.06	.28**	.16*	.31**
No. Abusive Incidents Toward Adult Family Members	.10	.28**	.24**	.48**
No. Different Abusive Methods Toward Adult Family Members	.06	.27**	.15*	.33**

* $p \leq .05$

** $p \leq .01$

11. Services provided and the recurrence of abuse

a. How many months of service have been provided the families?

The total number of months of service to validly cited families ranges from 1 to 240 months. Table 49 indicates that 28.8% of the families received a year or less of service; another 22% received more than one year but not more than 2 years of service; another 14.2% received more than 2 years but not more than 3 years of service; the remaining 35% received more than 3 years of service.

b. How many times have these families' cases been opened?

Table 50 indicates that the number of openings for the validly cited families range from 1 to 12. More than half of these families have one opening, only 25% have 2 openings, 9.6% have 3 openings, and 6.0% have 4 openings.

Table 51 indicates that the length of time the case remains open at the time of the first citation ranges from a minimum of less than one month to a maximum of 109 months. Forty-one and one tenth percent are closed by the end of one year of service; another 19.2% are closed by the end of two years of service. Thus, a total of 60.3% are closed by the end of 2 years of service.

Table 52a indicates that the time lapse between the first citation closing and the next case opening for the 72 validly cited families where there was a second opening ranges from 1 to 49 months, with 83.3% of these 72 cases reopening within a year of the time of the 1st citation closing.

Table 52b indicates that 59.1% of the 22 re-cited families were re-cited within the first year after the first citation closing.

c. How much service was received prior to a family's first citation?

Table 53 indicates that 29.6% of the families with a valid citation had a case opening and closing prior to their first citation for abuse. Twelve and three tenths percent of the families had more than one case opening and closing prior to the first citation.

Table 54 indicates that 42.3% of the validly cited families had received some service prior to their first citation; 27.3% of the families had received no more than one year of service while 15% had received more than one year of service.

TABLE 49: Months of service to families with at least one valid citation (N = 260)

Number of Months	Number of Families	Percent
0 - 12	75	28.8
13 - 24	57	22.0
25 - 36	37	14.2
Over 36	91	35.0
TOTAL	260	100.0

TABLE 50: Numbers of case openings for families with at least one valid citation (N = 260)

Number of Openings and Closings	Number of Families	Percent
1	138	53.1
2	65	25.0
3	25	9.6
4	18	6.9
5	8	3.1
6	3	1.1
7	2	.8
12	1	.4
TOTAL	260	100.0

TABLE 51: Months of service during citation 1 for families with at least one valid citation (N = 260)

Number of Months	Number of Families	Percent
1-12	107	41.1
13-24	50	19.2
25-36	33	12.7
37-48	20	7.7
49-60	20	7.7
61-72	13	5.0
73-84	6	2.3
85-96	8	3.1
97-108	1	.4
109	1	.4
Unknown	1	.4
TOTAL	260	100.0

TABLE 52: Months from first citation closing to re-opening and to re-citation (N = 260 families)

a) Months from closing to next opening

Number of Months	Number of Families	Percent
1-12	60	23.1
13-24	6	2.3
25-36	5	1.9
37-48	0	0
49	1	.4
No re-opening or never closed	188	72.3
TOTAL	260	100.0

b) Months from closing to next citation

1-12	13	5.0
13-24	4	1.5
25-36	2	.8
37-48	1	.4
49-60	1	.4
61	1	.4
No re-citation or never closed	238	91.5
TOTAL	260	100.0

TABLE 53: Number of case openings and closings before citation 1 opening (N = 260 families)

Number of Openings and Closings	Number of Families	Percent
0	183	70.4
1	45	17.3
2	21	8.0
3	7	2.7
4	2	.8
7	1	.4
Unknown	1	.4
TOTAL	260	100.0

TABLE 54: Months of service received prior to first citation (N = 260 families)

Months of Service	Number	Percent
0	148	56.9
1-12	71	27.3
13-24	14	5.4
25-36	9	3.4
37-48	10	3.8
49-60	2	.8
61-72	2	.8
73-84	1	.4
226	1	.4
Unknown	2	.8
TOTAL	260	100.0

TABLE 55: Correlations between occurrence of prior abuse and variables indicating services provided (N = 318 families)

	Number of Openings	Time Case Open for 1st Citation	Case Open When Record Read
Occurrence of all prior abuse	.12*	.39**	.13*
Occurrence of prior physical abuse	.10	.30**	.13*
Occurrence of prior emotional abuse	.13*	.14*	-.04
Occurrence of prior sexual abuse	-.01	.15**	.15**
Occurrence of prior neglect	.10	.27**	.03

* $p \leq .05$

** $p \leq .01$

d. What is the correlation between number of incidents and amount of service?

The total number of incidents is positively related to length of service during the citation one opening ($r = .47$, $N = 318$, $p \leq .01$) and during the next opening ($r = .33$, $N = 90$, $p \leq .01$), to numbers of openings ($r = .17$, $N = 328$, $p \leq .01$), to total amount of service ($r = .62$, $N = 328$, $p \leq .01$), to number of months of service before citation one ($r = .40$, $N = 316$, $p \leq .01$), and to the likelihood of the case still being open at the time of the case record reading ($r = .30$, $N = 328$, $p \leq .01$).

As can be seen in Table 56, number of casework contacts is significantly and positively correlated with each index of abuse and placement, with the exception of the index "number of sexual abuse incidents." The significant correlations indicate that those families with the most abuse do receive the most service from the Child Welfare agencies. The substantial correlation between months of casework service and number of casework contacts would suggest that the greater number of contacts is achieved by contacts made over a long period of time rather than intensive service during a short period of time. The lack of a significant correlation between amount of sexual abuse and extent of casework contact requires further analysis for interpretation: This could reflect either consistently large or small numbers of contacts for all families with any sexual abuse.

TABLE 56: Number of casework contacts correlated with indices of repetition of abuse and with placements

Index	Casework Contacts	N
No. citations for family	.20**	328
No. incidents for family	.51**	328
No. physical abuse incidents	.45**	328
No. emotional abuse incidents	.22**	328
No. sexual abuse incidents	.09	328
No. neglect incidents	.28**	328
No. citations after 1st citation closing	.27**	242
No. incidents after 1st citation closing	.37**	90
Months of casework service	.55**	328
Placement for protection from abuse	.28**	328
Placement for other reasons	.41**	328

** $p \leq .01$

e. What is the relationship between therapy and the recurrence of abuse?

The relationship between participation in group, family, or individual therapy and discontinuation vs. repetition of child abuse was explored. Fifty-eight of the 328 families were involved in some kind of therapy - most of them in group therapy. Dates of service and numbers of contacts were coded from the records of the MH/MR offices in the two counties. These codes were then interfaced with the dates of child abuse incidents coded from the Children's Bureaus case records. Based on these data, families were categorized as falling into one of three categories: (1) One or more child abuse incidents recorded a year or more after the first therapy contact, (2) one or more child abuse incidents recorded after the last therapy contact, (3) no child abuse incidents recorded during either of the former time periods.

Table 57 lists the percentages of families falling into each group. Thirty-four and five tenths percent fall into group (1) which had one or more incidents after at least one year had elapsed from the time of the first therapy contact; 25.9% fall into group (2) which had one or more incidents after the last therapy contact; and 60.3% fall into group (3) which had no incident either after the last therapy contact or after one year or more following the first therapy contact.

Table 57 also shows descriptive statistics for the number of therapy contacts per family for each group. In each of these three groups of families were some who had no more than one therapy contact; the maximum number was 136 for the two repetition groups, and 280 for the no-repetition group. (When two adults in a family attended a therapy session, the attendance of each was coded as a separate contact). By and large, the families in the no-repetition group had substantially more therapy contacts than had those in the two repetition

TABLE 57: Repetition of abuse and number of therapy contacts for families in group therapy (N = 58)

	Number of Families	% of Total Group	Number of therapy contacts		
			Range	Mean	Median
Families in which there was repetition of abuse one year or more after first therapy contact	20	34.5	1-136	46	31
Families in which there was repetition of abuse after last therapy contact	15	25.9	1-136	34	12
Families in which there was no repetition of abuse during either time period above	35	60.3	3-280	64	36

groups (a mean of 64 for the former compared to means of 46 and 34 for the latter). Discontinuation of abuse thus seems to be associated with more intense therapy in the sense of numbers of therapy contacts. In all likelihood, those families with few therapy contacts were those who were highly resistant to the treatment process and did not cooperate, refusing or failing to attend therapy sessions. Thus, repetition of abuse occurs more frequently among families who do not cooperate with the therapy treatment process while cooperation, as measured simply by attendance at therapy sessions, is associated with decreased likelihood of further abuse.

Since the amount of time which elapsed since the first therapy contact might affect the chances for recording a repeated incident of abuse, the average number of years from time of first contact until the year 1977, when coding of case records was finished was calculated. The records for those families for whom an abuse incident had been recorded one year or more after the first contact were coded on an average of 5.4 years from the year of first contact. Records for those families for whom no incident had been recorded one or more years after the first therapy contact were coded an average of 4.7 years after the first therapy contact.

Likewise, time since last therapy contact was calculated since this time lapse could affect the chances for a recurrent incident on the second index of repetitions. The records of families with a recorded child abuse incident after the last therapy contact were coded an average of 3.8 years after the last contact; the records of those without an incident, an average of 3.2 years after the last contact.

Both "no repetition groups" thus averaged less time since the "marker" events from which repetition of abuse was calculated, necessitating some qualification of the conclusion that increased attendance at therapy sessions is directly associated with decreased likelihood of repetition of abuse.

It was of interest to know the extent to which the group therapy participants families included families who are known from the case records to be the more "chronic" abusers. Seventeen were families for whom a maximum of one incident was recorded; 21 were families for whom two or three incidents were

recorded; 20 were families for whom four or more incidents were recorded in the case records. Thus, the participants appear to be drawn in approximately equal proportions from these three groups.

Each of the 328 families was scored "yes" or "no" for whether any child was put in foster placement by the child welfare agencies for the purpose of protection from abuse. The number of therapy contacts was correlated with this score ($r = .26$, $p \leq .01$). Service by the therapy component was significantly related to foster placement of the children for abuse protection, suggesting that the most severe cases of abuse, i.e., where removal of the child was felt to be warranted, were also those who were likely to be referred for therapy and to continue in therapy.

There was also a significant correlation ($r = .23$, $p \leq .05$) between the number of incidents scored for the 90 families during the opening following the first citation closing, and the number of therapy contacts. In this analysis of the data, the dates of these two variables were not compared. However, it is likely that this significant correlation relates to the increased use of therapy for repeaters.

Table 58 lists the correlations between number of therapy contacts and indices of repetition of abuse and of placement.

The number of therapy contacts is unrelated to the number of abuse incidents recorded for the family. The one incident index which is correlated with therapy contacts is the number of abuse incidents recorded after citation one closing and reopening ($r = .23$). This is a somewhat surprising result which is open to several interpretations. One is that unlike casework service, which continues while the case is open regardless of client cooperation, the number of therapy contacts is highly dependent on client cooperation. It appears that those families who have a stake in therapy contacts continue with the therapy program - namely, those whose continued abuse after the citation one closing may open them to threats of removal of the children from the home, or those whose children's return from placement may be seen by them as dependent on cooperation with the therapy service program. To check this or other interpretations will require further analyses which consider when the incidents occurred and when the therapy occurred.

TABLE 58: Number of therapy contacts correlated with indices of repetition of abuse and with placements

Index	Therapy Contacts	N
Number of citations for family	.10	328
Number of incidents for family	.07	328
Number of physical abuse incidents	.08	328
Number of emotional abuse incidents	-.04	328
Number of sexual abuse incidents	-.01	328
Number of neglect incidents	.05	328
Number of citations after 1st citation closing	.09	242
Number of incidents after 1st citation closing	.23*	90
Months of casework service	.15**	328
Placement for protection from abuse	.26**	328
Placement for other reasons	.09	328

* $p \leq .05$

** $p \leq .01$

B. Interview with female and male heads of household*

1. Demographic characteristics of heads of household

The material that follows in this subsection provides information on the demographic characteristics of interview respondents and their families, and is based on the interviews with the female heads of household.

a. What is the level of education completed by the heads of household?

As can be seen in Table 59, 34.5% of the female heads completed 12 or more years of schooling with 9.3% of the total population having had some years of schooling beyond high school. An additional 31.8% had 1 or 2 years of high school, 27.1% had 1 to 3 years of junior high school. 6.6% had no more than a sixth grade education, with 4% of the total population having had no more than 3 years of education.

Thirty-one and one tenth percent of the 132 male heads* completed 12 or more years of education, with 6.1% having completed some schooling beyond high school. An additional 20.4% had 1 or 2 years of high school; 19.7% had one to three years of junior high school; 9.9% had no more than a sixth-grade education, with 4.5% having had no more than three years of education (see Table 59a).

Thus, a slightly higher proportion of the female heads than of the male heads completed high school, and a slightly higher proportion of the males had only an elementary school level of education.

b. How many of the heads of household have received "special" education?

Eleven and nine tenths percent of the female heads were in special education classes at some time during their school years, indicating that they were recognized as having learning problems or emotional problems which interfered with their ability to function in a regular classroom. Of the 132 male heads of household, 10.6% had been in special education, a lower percentage than for the women (see Table 59b).

c. What is the age of the heads of household?

The ages of the female heads ranged from 19 to 64 at the time of the interview (see Table 60a). Twenty-two and five tenths percent were 25 years old or younger. Twenty-seven and two tenths percent were from

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*The results presented in this section are largely those from the 151 interviews with the female heads of household. Results from the 66 interviews with the males are given when they add to the picture provided by the female interviews. Since the interview gathered information on the spouse of person interviewed, some information on the male heads of household (N = 132) is available from the female interview.

TABLE 59: Education

(a) Education completed

(1) Education completed by female respondent

Years of Education	Number	Percent
1- 6	10	6.6
7-11	89	58.9
12	38	25.2
13-16	14	9.3
TOTAL	151	100.0

(2) Education completed by male head

Years of Education	Number	Percent
0	3	2.3
1- 6	10	7.6
7-11	53	40.1
12	33	25.0
13-16	8	6.1
No answer	25	18.9
No male	19	-
TOTAL	151	100.0

(b) Special education

(1) Females in Special Education

	Number	Percent
No	133	88.1
Yes	18	11.9
TOTAL	151	100.0

(2) Males in Special Education

	Number	Percent
No	81	61.4
Yes	14	10.6
No answer	37	28.0
No male	19	-
TOTAL	151	100.0

TABLE 60: Age

(a) Female interviewee age at time of interview

	Number	Percent
Under 21	2	1.3
21-30	65	43.1
31-40	57	37.8
41-50	20	13.2
51-60	5	3.3
61 and over	2	1.3
TOTAL	151	100.0

(b) Male age at time of interview

	Number	Percent
Under 21	3	2.3
21-30	38	28.8
31-40	45	34.1
41-50	25	18.9
51-60	9	6.8
61	1	0.8
No answer	11	8.3
No male	19	-
TOTAL	151	100.0

26 to 31 years of age. The next 26.5% were from 32 to 38 years of age. The remaining 23.8% were from 39 to 64 years of age, and were spread across this age range such that most fall at the lower end of the older age bracket.

The ages of the 132 male heads ranged from 20 years to 61 years at the time of the interview (see Table 60b). Twenty-two and seven tenths percent were 28 or younger; 23.5% were from 29 to 34 years old; 23.5% were from 35 to 42 years old; and 22% were from 43 to 61 years of age.

d. What is the religious preference of the heads of household?

Less than 1% of the female heads of household was Jewish; 23.8% were Catholic and 62.3% were Protestant. None of the male heads was Jewish; 23.5% were Catholic, and 47% were Protestant (see Table 61).

(1) How frequently do the heads of household attend religious services?

Thirteen and two tenths percent of the female heads reported attending religious services a frequency of every other month to once a year at the time of the interview ("now"); 10.6% did at the time of the first citation ("then"). Nine and nine tenths percent of the total female head population reported attending religious services once or twice a month "now" and 9.3% did "then"; 11.9% reported attending religious services 3 or 4 times a month "now" and 14.6% did "then"; 5.3% reported attending services more than once a week "now" and 2% did "then" (see Table 62).

Twenty-two and seven tenths percent of the 132 males were described by the females as attending religious services at the time of the interview; 11.4% attended from twice in 6 months to once a year; 4.5% attended once or twice a month; 3.8% attended 3 or 4 times a month; 3% attended more than once a week. About 80% of the males either never attended religious services or had missing information.

e. What is the ethnic background of the heads of household?

The ethnic backgrounds of the female heads are quite varied. The group with a Pennsylvania Dutch background is the largest and accounts

TABLE 61: Religious preference

		Female			Male	
		Number	Percent		Number	Percent
Jewish		1	.7		0	0
Roman Catholic		36	23.8		31	23.5
Protestant		94	62.3		62	47.0
Lutheran	36			19		
Methodist	9			2		
Episcopalian	2			1		
Baptist	7			5		
Reformed	2			1		
Pentecostal	1			-		
Jehovah Witness	2			2		
Moravian	1			1		
Nazarene	1			1		
Bible Fellowship	1			-		
United Ch. of Christ	2			1		
Presbyterian	-			2		
Seventh Day Adv.	-			2		
Protestant	30			25		
Atheist		0	0		1	.7
No preference or no answer		20	13.2		38	28.8
				No male	19	-
TOTAL		151	100.0		151	100.0

TABLE 62: Attendance at religious services

	Attend Now		Attend Then	
	Number	Percent	Number	Percent
Female				
More than once weekly	8	5.3	3	2.0
Weekly	15	9.9	21	13.9
One to three times a month	18	11.9	15	9.9
Once or twice in three months	11	7.3	6	4.0
Once or twice in six months	5	3.3	7	4.6
Once a year	4	2.7	3	2.0
Never or no answer	90	59.6	96	63.6
TOTAL	151	100.0	151	100.0
Male				
More than once weekly	4	3.0	4	3.0
Weekly	4	3.0	7	5.3
One to three times a month	7	5.3	5	3.8
Once or twice in three months	8	6.1	5	3.8
Once or twice in six months	4	3.0	5	3.8
Once a year	3	2.3	3	2.3
Never or no answer	102	77.3	103	78.0
No male	19	-	19	-
TOTAL	151	100.0	151	100.0

for about one-third of the female population, with about another one-tenth being mixed Pennsylvania Dutch-and-other background. Only 4.6% of the female population were Black; 11.9% were Puerto Rican. The majority of the remaining female heads were of mixed Eastern European background. The largest single ethnic group among the males, as among the females, was given as Pennsylvania Dutch (about one-third of the male heads). Seven and six tenths percent of the male heads were Black, and 11.4% were Puerto Rican (see Table 63).

f. How many single parent families were there at the time of abuse?

Eighty-eight and eight tenths percent of the 260 families with a valid citation were two-parent families at the time of abuse (see Table 64).

g. What is the relationship between demographic characteristics and the recurrence of abuse?

Table 65a summarizes the analyses of age of household head at time of interview, extent of attendance at religious services at the time of the interview, and at the time of the first citation, number of years of education completed, and attendance in special education classes as described by female heads by the various indices of repetition of abuse. The only significant relationships are between age of (female) head of household and both the total number of citations for the family ($r = -.21$, $p \leq .01$) and the number of citations received by the family after the first citation case closing ($r = -.27$, $p \leq .01$). The older the female head at the time of the interview, the smaller the likelihood of the family being classified under these two definitions of repeated abuse. A negative relationship which approaches significance is also indicated between age of female head and the number of incidents (as opposed to just citations) in the family's record after the first citation closing ($r = -.25$, $p = .07$). Current attendance at religious services is not significantly related to the number of incidents for the family, but the trend ($r = -.14$, $p = .08$) is interesting in light of other observations (E. Herrenkohl, 1978) about a negative relationship between religious involvement and continued abuse.

TABLE 63: Ethnic background

Ethnic Background	Female		Male	
	Number	Percent	Number	Percent
Black	7	4.6	10	7.6
Spanish-Speaking (Puerto Rican)	18	11.9	15	11.4
White	126	83.5	77	58.3
No answer	0	0	30	22.7
No male	-	-	19	-
TOTAL	151	100.0	151	100.0

TABLE 64: Numbers of one and two parent families at time of abuse

Number of Parents	Families with a Valid Citation	
	No.	%
Single Parent	29	11.2
Two Parents	231	88.8
TOTAL	260	100.0

TABLE 65a: Correlations between selected demographic variables and indices of repetition of abuse as reported by female heads

(a) Females

	Number of Citations for Family	Number of Incidents for Family	No. of Citations After Citation 1 Closing	Number of Incidents After Citation 1 Closing
Years education completed	.10 (151)	-.09 (151)	.13 (102)	.07 (48)
Attendance in special education classes	-.05 (151)	.06 (151)	.02 (102)	.15 (48)
Age at time of interview	-.21** (151)	.00 (151)	-.27** (102)	-.25 (48)
Current attendance at religious services	.04 (151)	-.14 (151)	-.03 (102)	-.05 (48)
Attendance at religious services at time of first citation	-.03 (149)	-.11 (149)	-.08 (100)	-.18 (47)

(b) Males

Years education completed	-.01 (107)	-.14 (107)	.10 (81)	-.01 (34)
Attendance at special education classes	.16 (95)	-.03 (95)	.07 (70)	.06 (27)
Age at time of interview	-.11 (121)	.02 (121)	-.20 (87)	-.11 (35)
Current attendance at religious services	-.01 (100)	-.15 (100)	-.09 (71)	-.03 (30)
Attendance at religious services at time of first citation	.04 (100)	-.15 (100)	-.05 (69)	0 (28)

** $p \leq .01$

The information about the male head of household supplied by the female head during the interview indicates age (of male head) to be the only variable which is somewhat strongly related to any index of repetition of abuse: age of the male head is negatively related to numbers of citations received by the family after the first citation ($r = -.20$, $p \leq .06$), (see Table 65b). Thus, the older the male partner, the smaller the likelihood of repeated citations after the first citation closing.

The data gathered from interviews of male heads indicate that years of education completed by both female and male heads is negatively related to the number of incidents of abuse recorded for the family. The correlation between years of school completed by female heads and abuse incidents for the family is $r = -.30$, $p \leq .05$, and for years of school completed by male heads is $r = -.36$, $p \leq .01$.

h. What is the correlation between the number of parents in a family at the time of abuse and selected variables?

Two-parent families make up 86% of the 328 families, and tend to be more abusive than one-parent families. Considering the correlations presented in Table 66, the following are indicated:

(1) Two-parent families are more likely to be cited for physical abuse than one-parent families ($r = .21$, $p \leq .01$) and to have a validated first citation ($r = .11$, $p \leq .05$).

(2) Two-parent families are more likely to have more incidents of abuse, whether cited or not, than one-parent families ($r = .11$, $p \leq .05$), particularly physical abuse incidents ($r = .13$, $p \leq .05$).

TABLE 65b: Correlations between selected demographic variables and indices of repetition of abuse as reported by male heads

(a) Female	Number of Citations for Family	Number of Incidents for Family	Number of Citations After Citation 1 Closing	Number of Incidents After Citation 1 Closing
Yeas of education completed	.12 (61)	-.30* (61)	.12 (38)	.08 (18)
Attendance at special education classes	.18 (44)	.09 (44)	-.06 (25)	Uncomputable (9)
Age at time of interview	.01 (60)	.15 (60)	-.07 (37)	-.28 (18)
Current attendance at religious services	.00 (55)	-.12 (55)	-.01 (33)	.12 (15)
Attendance at religious services at time of first citation	.01 (53)	-.13 (53)	-.13 (32)	.05 (13)
(b) Male				
Yeas of education completed	-.18 (66)	-.36** (66)	-.24 (40)	-.31 (19)
Attendance at special education classes	.18 (65)	.03 (65)	.02 (40)	.17 (19)
Age at time of interview	.05 (66)	.14 (66)	.17 (40)	.08 (19)
Current attendance at religious services	-.06 (65)	-.13 (65)	-.03 (39)	.13 (18)
Attendance at religious services at time of first citation	-.03 (65)	-.06 (65)	-.13 (39)	.06 (18)

* $p \leq .05$

** $p \leq .01$

TABLE 66: Correlation between number of parents at time of abuse and selected variables

	r	N
Number of citations for physical abuse	.21**	328
Validation of the first citation	.11*	317
Validation of the second citation	.19	74
Number of abuse incidents in a family	.11*	328
Number of physical abuse incidents in a family	.13*	328
Existence of abuse prior to citation 1	.10	318
Placement of children for protection from abuse	.22**	328

* $p \leq .05$

** $p \leq .01$

(3) Two-parent families are more likely to have children placed outside the home to protect them from abuse ($r = .22$, $p = \leq .01$).

i. What is the relationship between number of family members and the recurrence of abuse?

Table 67 indicates correlations between number of family members and indices of recurrence. None of these correlations reaches the .05 level of significance, although the correlations between number of incidents for a family and number of family members as reported by both the females and males approach that level.

j. What is the relationship between income level at the time of interview and the recurrence of abuse?

Current income level without correction for taxes or for number of people in the family as reported by female heads was negatively related to the number of incidents recorded in the case record for the family: the lower the income level, the higher the number of incidents of abuse ($r = -.17$, $N = 151$, $p = .03$). The data also indicate that among families whose cases had been closed and reopened, the number of further abuse incidents was positively correlated with income fluctuation during the year preceding the interview ($r = .30$, $N = 44$, $p = .04$). Those with more abuse incidents more frequently indicated fluctuation of their income during the preceding year. (These correlations were not significant in the data from the male heads' interviews).

In a cross-tabulation of level of income by number of abuse incidents (using the female head interviews), a clearer picture is obtained of the relationship between the two dimensions; 57.2% of the single incident families fall into the highest income range, while only 21.2% and 29.6% of the two "repeater" categories fall into this highest range (see Table 68).

k. What is the relationship between issues related to a respondent's housing and the recurrence of abuse?

Several questions in the interview concerned the quality of housing and related matters. Table 69 indicates that 41.1% of the female respondents indicate having lived in their present residence for one year or less. Essentially the same figure is reported by the male respondents.

Table 70 indicates that 38.5% of the female respondents reported moving in the year preceding the interivew, 12% more than once. Thirty and three tenths percent of the male respondents indicated moving within that year, 15.1% more than once.

Table 71 indicates that approximately 50% of both female and male respondents felt a need for different housing.

TABLE 67: Correlation between number of family members and the recurrence of abuse

	Number of Citations for Family	Number of Incidents for Family	Number of Citations After Citation One Closing	Number of Incidents After Citation One Closing
Number of family members (reported by females)	-.12 (151)	.14 (151)	-.10 (102)	.14 (48)
Number of family members (reported by males)	-.06 (66)	.24 (66)	00 (40)	-.13 (19)

TABLE 68: Cross-tabulation of income level at the time of the interview by number of abuse incidents per family

Number of incidents per family	$100-499 N	$100-499 %	$500-799 N	$500-799 %	$800 or more N	$800 or more %	Total N*	%
1	9	21.4	9	21.4	24	57.2	42	28.4
2-3	18	34.6	23	44.2	11	21.2	52	35.1
4 and over	20	37.1	18	33.3	16	29.6	54	36.5
							148	100.0

*Three families with no verified incidents are not included.

TABLE 69: Amount of time respondent lived in the residence at time of interview

Number of Years	Female		Male	
	Number	Percent	Number	Percent
1 or less	62	41.1	26	39.4
2	23	15.2	11	16.7
3	10	6.6	3	4.5
4	13	8.6	2	3.0
5	8	5.3	5	7.6
6-10	21	13.9	10	15.2
11-15	10	6.6	4	6.1
16-20	3	2.0	1	1.5
21 and over	0	0	3	4.5
No answer	1	.7	1	1.5
TOTAL	151	100.0	66	100.0

TABLE 70: Number of times respondent moved in the year preceding the interview

Number of Times	Female		Male	
	Number	Percent	Number	Percent
0	93	61.5	46	69.7
1	40	26.5	10	15.2
2	11	7.3	5	7.6
3	5	3.3	2	3.0
4	1	.7	3	4.5
8	1	.7	0	0
TOTAL	151	100.0	66	100.0

TABLE 71: Number of respondents who felt the need for different housing

Need for different housing	Female		Male	
	Number	Percent	Number	Percent
No	74	49.0	33	50.0
Yes	76	50.3	32	48.5
No answer	1	.7	1	1.5
TOTAL	151	100.0	66	100.0

TABLE 72: Number of respondents living in public housing at time of interview

Live in Public Housing	Female		Male	
	Number	Percent	Number	Percent
No	121	80.1	57	86.4
Yes	29	19.2	7	10.6
No answer	1	.7	2	3.0
TOTAL	151	100.0	66	100.0

Table 72 indicates that 19.2% of the female respondents lived in public housing at the time of the interview as compared to 10.6% of the male respondents.

In an examination of correlations between these four preceding issues - (a) years lived in residence, (b) number of times moved in the year, (c) the need for different housing and (d) public housing residency - and the recurrence of abuse, none were found to be significant ($p > .05$).

2. Stresses on the families

a. With what frequency does stress occur in the families?

The 39 sources of stress listed in Table 73 are the dimensions about which the respondent was asked in the "stresses" section of the interview. For each, the respondent indicated the extent to which the issue was a problem for anyone in the family at the time of the interview (Now) and at the time of the first citation (Past). Table 74 indicates the total number of stresses reported by female and by male respondents.

b. What is the relationship between stress and the indices of recurrence?*

Table 75a indicates the correlations of indices of recurrence and recidivism with each type of stress. Indices of recurrence and recidivism were also correlated with total number of stresses cited by the female respondent.

The total number of citations for a family is significantly correlated ($p \leq .05$) with current stress due to bill collectors ($r = .21$), legal problems ($r = .20$), and too much social service agency involvement ($r = .33$), and with stress at the time of the first citation due to frequent family moves ($r = .21$), behavior of the children in school ($r = -.19$), and too much social service agency involvement ($r = .16$).

To the extent that economic problems differentiate these families with more citations, they do so by dint of the pressure of the debts incurred by the families and the hounding of bill collectors for payment, or perhaps by leading to legal problems or by necessitating frequent moves of the family to escape bill collectors. However, these same families report fewer problems with school behavior of their children at the time of the first citation than other families with fewer citations. In general, however,

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*The responses to the stress questions constitute self-reports of stress at two distinct points in time. Indices of recurrence refer to the entire time span between those two points. These correlations should be viewed with this in mind.

TABLE 73: Percentage of female respondents reporting presence of individual stresses (N = 151)

	Extent Now				Extent Past			
	Never	Some of the Time	Most of the Time	All of the Time	Never	Some of the Time	Most of the Time	All of the Time
Insufficient income	26.5	32.5	19.2	21.8	37.1	19.8	17.9	25.2
Unemployment	60.9	19.2	5.3	14.6	68.3	11.9	7.9	11.9
Other economic problems	89.4	5.3	.7	4.6	88.8	3.3	3.3	4.6
Crowding in home	76.2	8.6	5.3	9.9	74.2	7.9	3.3	14.6
Lack of home conveniences	82.8	7.3	4.0	5.9	78.1	6.0	7.3	8.6
Distance from community services	78.1	14.6	1.3	6.0	85.5	9.9	2.0	2.6
Frequent family moves	87.4	5.3	2.0	5.3	84.8	3.3	3.3	8.6
Other housing problems	77.5	4.6	5.3	12.6	82.8	4.0	3.3	9.9
Conflict with neighbors	74.2	17.2	.7	7.9	68.9	13.2	6.6	11.3
Crowding in neighborhood	87.4	8.6	.7	3.3	88.8	2.6	4.6	4.0
Crime in neighborhood	78.2	14.6	2.6	4.6	87.4	4.0	6.0	2.6
Other neighborhood problems	84.2	6.6	4.6	4.6	90.1	2.6	3.3	4.0
Break-up of family	68.2	12.6	6.6	12.6	64.2	11.9	7.3	16.6
Pregnancy	94.8	2.6	0	2.6	90.1	3.3	1.3	5.3
Marital conflict	68.9	20.5	6.0	4.6	47.0	21.8	14.6	16.6
Dissatisfying marital relationship	80.1	9.3	3.3	7.3	61.6	11.9	9.9	16.6
Problems w. other adults in home	96.6	2.0	.7	.7	90.8	3.3	1.3	4.6
Problem children	51.0	29.2	9.9	9.9	53.0	21.2	11.9	13.9
Behavior in school	66.9	21.2	9.9	2.0	74.8	11.9	7.3	6.0
Other problems with children	83.5	7.9	3.3	5.3	81.5	6.6	5.3	6.6
Bill collectors	82.1	13.2	.7	4.0	79.5	9.9	5.3	5.3
Trouble with police	92.1	5.3	1.3	1.3	81.4	9.3	6.0	3.3
Other legal concerns	83.4	8.6	2.0	6.0	93.4	3.3	2.0	1.3
Responsibilities of parenting	72.2	21.9	3.3	2.6	53.6	17.9	10.6	17.9
Language barriers	94.7	2.6	.7	2.0	94.1	2.6	.7	2.6
Loneliness	65.6	17.2	5.3	11.9	63.6	17.2	6.6	12.6
Lack of friends	84.8	7.9	2.0	5.3	80.8	7.3	3.3	8.6
Unfulfilled ambitions	62.9	23.9	5.3	7.9	69.6	17.2	5.3	7.9
Other personal problems	88.7	5.3	2.0	4.0	82.7	7.3	4.0	6.0
Conflict with relatives	65.6	17.2	4.6	12.6	60.9	15.9	7.3	15.9
Too much agency involvement	92.1	2.6	2.0	3.3	75.5	8.6	6.6	9.3
Problems with non-family adults	91.4	4.0	4.6	0	90.8	2.6	2.6	4.0
Chronic fatigue	63.5	17.9	7.3	11.3	72.9	11.9	6.6	8.6
Physical illness	69.5	15.9	3.3	11.3	69.6	13.2	7.9	9.3
Mental illness	84.7	7.3	2.0	6.0	78.2	6.6	7.3	7.9
Retardation	91.5	2.6	1.3	4.6	90.0	4.0	.7	5.3
Alcohol use	91.4	3.3	4.0	1.3	76.9	6.6	6.6	9.9
Drug use	98.0	1.3	0	.7	94.1	2.6	1.3	2.0
Other health problems	92.0	6.0	.7	1.3	94.7	2.6	.7	2.0

TABLE 74: Number of stresses reported by female and by male respondents

Number of Stresses	Female Respondents		Male Respondents	
	Number	Percent	Number	Percent
0	0	0	1	1.5
1- 5	19	12.6	12	18.2
6-10	41	27.2	20	30.3
11-15	40	26.5	17	25.8
16-20	31	20.5	13	19.7
21-25	15	9.9	2	3.0
26-30	4	2.6	1	1.5
31-35	1	.7	0	0
TOTAL	151	100.0	66	100.0

TABLE 75: Correlations of stresses (present and past) with indices of recurrence and recidivism

a) Stresses as reported by female respondents

	Number of Citations for Family (N=151)		Number of Abuse Incidents for Family (N=151)		Number of Incidents After 1st Citation Closing (N=48)	
	Now	Past	Now	Past	Now	Past
Insufficient income	.12	.13	.02	.02	.02	.13
Unemployment	.01	-.03	-.07	-.04	.07	.31*
Other economic problems	.05	.02	.13	.05	.45**	.09
Crowding in home	-.07	-.15	-.09	-.08	-.10	-.01
Lack of home conveniences	-.03	.05	.07	.11	-.11	-.06
Distance from community services	-.03	-.05	.01	.03	-.15	.27
Frequent family moves	-.03	.21**	.17*	.34**	-.11	.24
Other housing problems	.05	.13	.07	.10	.13	.00
Conflict with neighbors	.00	.06	.07	.10	-.10	.00
Crowding in neighborhood	-.05	.05	.11	.08	-.11	-.05
Crime in neighborhood	-.03	-.07	.09	.00	-.01	-.08
Other neighborhood problems	-.15	-.01	-.01	.08	-.01	.39**
Break-up of family	.14	.08	.24**	-.03	.26	.02
Pregnancy	.09	.10	.02	.04	.00	.53**
Marital conflicts	-.01	.07	-.12	.03	-.02	.11
Dissatisfying marital relationship	-.02	.06	.08	.11	.19	.07
Problems with other adults in home	.06	-.05	.07	.17*	-.07	-.08
Problem children	-.01	-.04	.02	.01	.01	-.22
Behavior in school	.04	-.19*	.06	.03	-.02	-.09
Other problems with children	.06	.06	.15	.14	.39**	-.06
Bill collectors	.21**	.14	.13	.19*	.22	.31*
Trouble with police	.13	-.01	.19*	.00	.18	.05
Other legal concerns	.20*	-.05	.02	-.09	-.01	-.07
Responsibilities of parenting	-.09	-.04	.00	.06	.06	.22
Language barriers	.01	.00	.06	.07	-.07	-.05
Loneliness	.11	.07	.08	-.02	-.06	-.07
Lack of friends	.00	.09	-.04	.19*	-.16	.26
Unfulfilled ambitions	.10	.01	.00	.00	.26	.28*
Other personal problems	-.07	.00	.03	.12	-.12	.22
Conflict with relatives	.01	.03	.12	.15	.32*	.06
Too much agency involvement	.33**	.16*	.21**	.06	.16	.42**
Problems with non-family adults	-.04	-.09	-.10	-.06	-.10	.03
Chronic fatigue	.00	-.03	-.06	.00	.01	-.01
Physical illness	.00	.08	-.03	-.11	.03	-.16
Mental illness	-.01	.07	.10	.02	.08	-.07
Retardation	-.13	.00	.06	.13	-.12	-.06
Alcohol use	-.04	.00	-.04	.12	-.10	.25
Drug use	.05	-.04	.08	-.03	-.07	-.12
Other health problems	.00	-.01	.02	-.06	.09	-.10

* $p \leq .05$

** $p \leq .01$

perceived stresses do not appear to be strongly related to the number of citations received by a family.

The total number of incidents for the family is significantly ($p \leq .05$) correlated with number of types of stresses mentioned by the female respondent for either point in time ($r = .16$, $N = 151$). The number of incidents is related to current stress due to frequent family moves ($r = .17$), break-up of the family ($r = .24$), trouble with police ($r = .19$), and too much social service agency involvement ($r = .21$). It is also significantly correlated with stress at the time of the first citation due to frequent family moves ($r = .34$), problems with other adults in the home ($r = .17$), bill collectors ($r = .19$), and lack of friends ($r = .19$).

Again, the moving around of a family appears to be a chronic source of perceived stress for families with many incidents of abuse. The pressure of bill collectors -- also cited as a stress by families with more incidents of abuse and by families with more citations for abuse -- may be one of the reasons for the frequent moves. Agency involvement again is perceived as a stress to a greater degree by these families than families with fewer incidents. The overall impression lent by the pattern of stresses described above is one of unstable family life and unsatisfying or conflicted personal relationships.

The number of citations received by a family after the closing of the case (following the first citation) is significantly ($p \leq .01$) correlated with only one perceived stress: current stress due to too much involvement of social service agencies ($r = .35$, $N = 102$). It was the impression of the research staff doing the coding of the case records that frequently the closing of a case followed a period of lack of contact with the client. Thus, those families whose cases are reopened with a new citation, having been brought to the attention of the agency by a new referral for suspected abuse, are likely to feel more resentment at the re-entrance of agency staff into the life of the family.

The number of incidents recorded for a family after re-opening of the case (as opposed to the number of citations recorded) is correlated ($p \leq .05$) with a greater variety of perceived stresses: current stress due to economic problems ($r = .45$), problems with children ($r = .39$), and conflicts with relatives ($r = .32$); and stress at the time of the first citation due to unemployment ($r = .31$), neighborhood problems ($r = .39$), pregnancy ($r = .53$), bill collectors ($r = .31$), unfulfilled ambitions ($r = .28$), and too much social service agency involvement ($r = .42$).

Perceived (and reported) economic problems appear to be more strongly related to this index than to the other indices, with unemployment and debts contributing to the pressures. In addition, those families whose cases are re-opened and continue to exhibit abusive treatment toward their children during this time also report more problems with their children, the extended family, personal problems, and the neighborhood.

It is hard to derive a consistent picture of individual stresses reported by families who repeat abusive treatment of their children, when measured by different indices of repetition. Insufficient income is not significantly correlated with repetition of abuse, largely because it is cited as a stress by almost all families and, thus, doesn't differentiate repeaters from non-repeaters. Results described earlier in the report do indicate that repeaters of abuse are more likely to be among the poorest families in the study. However, the frequent citation by repeaters of bill collectors as a stress points to the greater economic pressures on these families, perhaps due to poor budgeting, larger families or, for some, more unemployment.

Indices using number of incidents (either total number or number reported in re-opening of the case) are significnatly related to more stresses than are indices using number of citations. Problems getting along

with adults involved with the family (relatives or other adults in the home) crop up for both indices, suggesting a generalized difficulty with interpersonal relationships.

All four indices are significantly related to the tendency to see agency involvement as a stress on the family. Overall, the repeaters tend to perceive agency service as a producer of stress rather than as an alleviator of it.

The correlations reported above between perceived stresses and repetition of abuse were based on the responses of the females. Separate analyses were performed on the responses of the male heads of household who were interviewed (Table 75b). Even fewer significant relationships were found in these analyses.

The total number of citations was significantly related ($p \leq .05$) to perceived stress at the time of the first citation due to housing problems ($r = .25$) and corwding in the neighborhood ($r = .29$).

No significant relationships were found between the stresses and total number of incidents, or between the stresses and number of citations after the closing of the case following citation one ($p < .05$).

The only significant correlation found between number of incidents after the case closing and stresses was that correlation involving frequent family moves at the time of the first c itation ($r = .49$, $p \leq .05$). Overall, few stresses cited by the males were significantly related to any of the indices of repetition; those that were are stresses related to housing and crowding in the neighborhood. This may reflect less willingness on the part of male respondents to be open about perceived stresses on the family, perhaps because they feel such stresses reflect badly on their ability to provide for their families, or perhaps because of a more reticent attitude toward self-disclosure in general. Other published research reports have reported males to be less likely than females to disclose problems.

TABLE 75: Correlations of stresses (present and past) with indices of recurrence and recidivism

b) Stresses as reported by male respondents

	Number of Citations for Family (N = 66)		Number of Abuse Incidents for Family (N = 66)		Number of Incidents After 1st Citation Closing (N=19)	
	Now	Past	Now	Past	Now	Past
Insufficient income	.05	.04	.06	.18	.07	.06
Unemployment	.00	.01	-.01	.14	-.34	-.02
Other economic problems	-.07	-.13	-.10	-.14	-.05	-.20
Crowding in home	.00	.03	.00	-.09	.01	.15
Lack of home conveniences	-.01	-.04	.00	-.06	.43	.15
Distance from community services	-.07	.00	-.04	-.08	-.13	.09
Frequent family moves	-.08	-.05	-.15	-.05	-.13	.49*
Other housing problems	.15	.25*	.11	.05	-.08	-.02
Conflict with neighbors	-.05	-.09	.03	.02	-.05	-.11
Crowding in neighborhood	.19	.29*	.22	.13	-.13	-.08
Crime in neighborhood	.08	.15	-.01	.09	-.04	-.09
Other neighborhood problems	.00	.00	.02	.02	-.13	***
Break-up of family	-.09	-.10	-.12	-.05	.27	.01
Pregnancy	-.06	-.08	.02	.11	***	-.13
Marital conflict	.13	-.01	-.02	.02	.05	.00
Dissatisfying marital relationship	.16	.03	.14	.08	-.23	-.14
Problems with other adults in home	***	.10	***	-.05	***	***
Problem children	.03	.02	.04	.23	.11	-.15
Behavior in school	.01	-.06	.13	.05	-.01	-.20
Other problems with children	.05	.15	.03	.09	-.02	-.02
Bill collectors	-.02	.05	-.06	-.02	-.13	.15
Trouble with police	.00	-.04	.00	.02	-.23	-.16
Other legal concerns	-.15	.03	-.08	-.01	-.27	.15
Responsibilities of parenting	.12	-.06	.17	.00	-.18	-.21
Language barriers	.03	.00	.24	.09	.15	.15
Loneliness	.01	.05	-.02	.03	-.07	.07
Lack of friends	.05	.03	-.01	-.06	-.19	-.13
Unfulfilled ambitions	-.05	-.03	-.02	-.05	-.30	-.27
Other personal problems	-.07	-.17	-.01	-.04	-.08	-.10
Conflict with relatives	-.09	.00	-.11	.06	-.23	-.04
Too much agency involvement	.00	.04	.11	.00	.15	-.11
Problems with non-family adults	-.06	.09	-.01	-.03	***	-.19
Chronic fatigue	-.08	-.15	.07	-.07	-.16	-.10
Physical illness	.06	.14	.05	.06	-.24	-.08
Mental illness	.09	-.03	.24	.00	-.18	-.21
Retardation	-.03	-.08	.14	.20	-.13	.01
Alcohol use	-.12	.18	-.16	-.08	***	-.12
Drug use	***	-.04	***	-.11	***	-.08
Other health problems	-.08	-.09	.00	-.05	.43	.43

* $p \leq .05$

*** uncomputable

c. What is the relationship between the different sources of stress?

A factor analysis was performed on the correlation matrix derived from the 39 stress dimensions. Several factors were identified. The items loading on each of the factors are listed in Table 76. These factors, for purposes of analysis, might be labeled: (1) marital relationship (where alcohol use was cited as a stress by a respondent, it was often done so in connection with marital conflict); (2) adequacy of income; (3) social relationships; (4) legal and physical problems; (5) problems of parenting; (6) conflict with others; and (7) neighborhood problems.

d. What is the relationship between the stress "factors" and repetition of abuse?

The responses of each interviewee were scored by counting the number of reported stresses relating to each of the factors. Separate factor scores were derived for past stresses (at the time of the first citation) and current stresses (or the time of the interview), as well as for differences between past and current stresses for each factor. The factor scores were then correlated with the total number of abuse incidents for the family, and the number of incidents for the family recorded after the case was closed and reopened. (A square root transofmration of the total number of incidents scores was performed in an effort to cope with the skewed distribution of these data.)*

The results of these correlations for the female respondents are listed in Table 77. Two factor scores were significantly correlated ($p \leq .05$) with the number of abuse incidents recorded for the family: current social relationships ($r = .16$) and current conflict with others ($r = .16$). In addition, there were trends toward significance in the correlations between number of incidents and inadequate income in the past ($r = .14$, $p = .08$), and number of incidents and current neighborhood problems ($r = .13$, $p = .09$).

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*While this procedure normalizes the distribution of all incidents of abuse, the effect on correlations involving the variable is modest, generally on the order of $\pm .01$ effect on the correlation coefficient.

TABLE 76: Results of factor analysis of 39 stresses

Factor	Item No.		Factor Loading
I.		Marital Relationship	
	16.	Dissatisfying marital relationship	.64
	15.	Marital conflict	.63
	37.	Alcohol use	.45
	22.	Trouble with police	.41
	14.	Pregnancy	.40
	13.	Break-up of family	.29
	31.	Too much agency involvement	.29
	32.	Problems with non-family adults	.22
II.		Adequacy of Income	
	1.	Insufficient income	.61
	21.	Bill collectors	.58
	27.	Lack of friends	.54
	8.	Other housing problems	.46
	2.	Unemployment	.37
	7.	Frequent family moves	.36
	28.	Unfulfilled ambitions	.35
	5.	Lack of home conveniences	.33
	4.	Crowding in home	.23
III.		Social Relationships	
	38.	Drug use	.50
	25.	Language barriers	.41
	39.	Other health problems	.41
	33.	Chronic fatigue	.32
	6.	Distance from community services	.28
	3.	Other economic problems	.26
	36.	Retardation	.25
	29.	Other personal problems	.25
	26.	Loneliness	.24
IV.		Legal and Physical Problems	
	23.	Legal concerns	.77
	34.	Physical illness	.32
V.		Problems of Parenting	
	18.	Problem children	.63
	19.	Behavior in school	.54
	20.	Other problems with children	.45
	24.	Responsibilities of parenting	.30
VI.		Conflict with Others	
	30.	Conflict with relatives	.57
	17.	Problems with other adults in home	.52
	35.	Mental illness	.44
	9.	Conflict with neighbors	.36
VII.		Neighborhood Problems	
	11.	Crime in neighborhood	.69
	10.	Crowding in neighborhood	.66
	12.	Other neighborhood problems	.19

TABLE 77: Correlations between stress factor scores and indices of repetition

Factor		Total No. Incidents (N=151)	No. Incidents After Citation 1 Closing and Reopening (N=48)
I. Marital relationship	(past)	.01	.25
	(now)	.04	.10
II. Adequacy of income	(past)	.14	.22
	(now)	.03	.00
III. Social relationships	(past)	.11	.08
	(now)	.16*	.03
IV. Legal and physical problems	(past)	-.10	-.19
	(now)	.07	.11
V. Problems of parenting	(past)	.00	-.08
	(now)	.08	.18
VI. Conflict with others	(past)	.10	-.07
	(now)	.16*	.17
VII. Neighborhood problems	(past)	.06	.04
	(now)	.13	-.09

* $p \leq .05$

TABLE 78: Correlations between the difference between past and present stress factor scores and indices of repetition

Factor	Total No. Incidents (N=151)	No. Incidents After Citation 1 Closing and Reopening (N=48)
I. Marital relationship	-.02	.16
II. Adequacy of income	.11	.22
III. Social relationships	-.04	.05
IV. Legal and physical problems	-.15	-.22
V. Problems of parenting	-.07	-.22
VI. Conflict with others	-.03	-.21
VII. Neighborhood problems	-.06	.09

Thus, families experiencing the most stress due to lack of sufficient and/or positive interactions with others were those most likely to exhibit repetition of abuse toward their children. In addition, families with financial and neighborhood problems also tended to exhibit repetition of abuse toward children.

None of the correlations between stress factor scores and number of incidents after case closing and re-opening was significant ($p \leq .05$). (Note that a smaller N, 48, was involved in these correlations, reducing the power of the statistical test.) However, the correlation related to marital relationships in the past did approach significance ($r = .25$, $p \leq .08$).

e. What is the relationship between repetition of abuse and changes in stress?

Table 78 indicates the correlations, none of which were significant, between indices of repetition and the difference between past and current extent of stress (using the seven factor scores).

f. What is the relationship between stress and the occurrence of different types of abuse?

Table 79 lists the correlations between stress factor scores and total number of different types of abuse incidents. As can be readily seen from this table, the numbers of <u>emotional</u> abuse incidents are most strongly correlated with stress factor scores, in both the female and male interview data. Significant positive correlations are indicated between number of emotional abuse incidents and perceived stress (by the female heads) on Factor I (Marital relationship) in the Past ($r = .27$, $p \leq .01$), Factor II (Adequacy of income) in the Past ($r = .20$, $p \leq .05$), Factor III (Social relationships) in the Past ($r = .24$, $p \leq .01$) and Now ($r = .19$, $p \leq .05$) Factor V (Problems of parenting) in the Past ($r = .25$, $p \leq .01$) and Now ($r = .25$, $p \leq .01$), Factor VI (Conflict with others) Now ($r = .20$, $p \leq .05$), and Factor VII (Neighborhood problems) in the Past ($r = .21$, $p \leq .01$).

According to Table 79, emotional abuse is more strongly related to perceived stresses than is physical abuse, sexual abuse, or neglect.

TABLE 79: Correlations between stress factor scores and type of abuse incident

a) For female respondents (N=151)

Factor		Physical	Emotional	Sexual	Neglect
I. Marital relationship	(past)	.03	.27**	.00	-.08
	(now)	.03	.02	.09	.02
II. Adequacy of income	(past)	.17*	.20*	-.11	-.06
	(now)	.04	.09	.00	-.08
III. Social relationships	(past)	.09	.24**	.00	.03
	(now)	.18*	.19*	.11	-.07
IV. Legal and physical problems	(past)	-.17*	-.12	.04	.01
	(now)	.00	-.04	.13	.06
V. Problems of parenting	(past)	.03	.25**	.06	-.18*
	(now)	.15	.25**	.06	-.10
VI. Conflict with others	(past)	.09	.14	.04	-.01
	(now)	.13	.20*	.06	.05
VII. Neighborhood problems	(past)	.05	.21**	.06	-.08
	(now)	.01	.02	.18*	.11

b) For male respondents (N=66)

I. Marital relationship	(past)	-.02	.11	.10	-.07
	(now)	.00	.10	.11	-.04
II. Adequacy of income	(past)	-.01	.16	.06	.15
	(now)	.00	.08	.03	.00
III. Social relationships	(past)	.03	.40**	-.12	-.12
	(now)	.20	.33**	.02	-.05
IV. Legal and physical problems	(past)	.16	.32**	-.07	-.04
	(now)	-.11	-.01	.22	-.07
V. Problems of parenting	(past)	.25*	.27*	.04	-.21
	(now)	.02	.06	.24*	.00
VI. Conflict with others	(past)	.22	.24*	.00	-.09
	(now)	-.06	.07	.11	-.03
VII. Neighborhood problems	(past)	.25*	.32**	.00	-.13
	(now)	.10	-.10	.04	.02

* $p \leq .05$

** $p \leq .01$

3. Attitudes and feelings about child-rearing

a. What is the relationship between recurrence of abuse and ideas about child-rearing?

Respondents were asked about the source of their ideas on child-rearing (see Table 80). The most frequently cited source of ideas for female respondents was the respondent's mother. One's own instincts or feelings (self) was the second most frequently cited source among the females, and one's own past experience, the third.

b. What is the relationship between desire to raise children differently than one's own parents and the recurrence of abuse?

Respondents were asked if they had wanted to raise their children differently from the way they were raised. Among the female respondents, 107 of the 151 total respondents said "yes" to this question. Perpetrators did not differ from non-perpetrators in their responses, nor was there any relationship between the number of incidents recorded for a respondent and the response to this question. However, there was a significant (negative) correlation between the response to this question and the number of abuse incidents recorded for the female respondent's family ($r = -.19$, $N = 150$, $p \leq .05$): The greater the number of incidents recorded for a family, the greater the likelihood that the respondent indicated she had no desire to raise her child(ren) differently from the way she was raised.

The way(s) in which a respondent indicated she would like to raise her child(ren) differently were categorized and analyzed. Up to three responses were coded for each respondent. These categories included the following expressed ideas: more love (than the respondent felt she had received), less punishment, better physical care, more freedom, more encouragement to be outgoing, a happier environment, more discipline, more guidance, more independence, a more stable environment, and more of a childhood, i.e., more time to be a child without adult responsibilities.

Fewer incidents of abuse for a family appear to be significantly related to a concern to provide one's children a more positive atmosphere during childhood than one had experienced oneself.

TABLE 80: Sources of ideas on child-rearing among female respondents

	Perpetrators (N=90)		Non-Perpetrators (N=60)		Total Females (N=150)	
	No.	%	No.	%	No.	%
Self	24	26.7	18	30.0	42	28
Past experience	12	13.3	13	21.6	25	16.7
Mother	32	35.6	24	40.0	56	37.3
Work	0	-	1	1.7	1	.7
Dr. Spock	2	2.2	2	3.3	4	2.7
Books	9	10.0	7	11.7	6	10.7
Father	11	12.2	4	6.7	15	10.0
Children's Bureau	5	5.6	0	-	15	3.3
Teachers	0	-	1	1.7	1	.7
Doctors	0	-	3	5.0	3	2.0
Spouse/Partner	1	1.1	2	3.3	3	2.0
Grandmother	1	1.1	0	-	1	.7
Do opposite of parents	4	4.4	2	3.3	6	4.0
Sister-in-Law	1	1.1	1	1.7	2	1.3
Mother-in-Law	3	3.3	1	1.7	4	2.7
Foster homes	1	1.1	0	-	1	.7
Watching others	4	4.4	2	3.3	6	4.0
Advice from others	2	2.2	0	-	2	1.3
Clinic	1	1.1	1	1.7	2	1.3
Babysitting	4	4.4	2	3.3	6	4.0
Bible	1	1.1	2	3.3	3	2.0
Sister	2	2.2	2	3.3	4	2.7
Stepsister	0	-	1	-	1	.7
Therapy	1	1.1	0	-	1	.7
The children	1	1.1	0	-	1	.7
Home Start	1	1.1	0	-	1	.7
Friends	1	1.1	0	-	1	.7
No one	0	-	2	3.3	2	1.3

TABLE 81: Categories of ways in which female respondents wanted to raise their children differently than they were raised (N=107)

Category	No. Respondents	Percent
More love	34	31.8
Better physical care	28	26.2
Less punishment	22	20.6
More freedom	15	14.0
More encouragement of social participation	13	12.1
Happier environment	10	9.3
More discipline	5	4.7
More guidance	5	4.7
More independence	5	4.7
Different family structure	5	4.7
More stable environment	3	2.8

As can be seen from Table 81, no one category was overwhelmingly mentioned by the respondents as a group. Of those categories with frequency over 10, only one related with a trend toward significance to the number of abuse incidents recorded for a respondent: the smaller the number of abuse incidents, the more frequently encouragement of greater social participation was mentioned ($r = -.16$, $N = 107$, $p = .083$).

Among the male respondents, there was a trend toward a significant positive correlation between the labeling as perpetrator or non-perpetrator and responses to the question "Are there any ways you want to raise your child(ren) differently from the way you were raised?"; perpetrators were more likely to respond "yes" to this question ($r = .20$, $N = 64$, $p = .112$).

c. What is the relationship between personal qualities thought to be important for children to develop and the recurrence of abuse?

Respondents were then asked, "What traits or characteristics do you feel are important for your child(ren) to develop?" The frequencies with which the most frequently occurring broad categories of traits were mentioned by female respondents are given in Table 82. Getting along well with others was the most frequently (60.7% of the respondents) mentioned category (this includes respect for others and being affectionate.) Of the categories with frequencies greater than 10, several were correlated with number of abuse incidents for the respondent and/or perpetrator status at a significant or close to significant level (see Table 83). Perpetrators were more likely to mention obedience ($r = .17$, $p = .035$) and self-sufficiency ($r = .14$, $p = .076$) (meaning ability to survive on one's own) and less likely to mention personal integrity ($r = -.20$, $p = .011$) (meaning self-respect and sincerity) than were non-perpetrators. The more abuse incidents recorded for the respondent, the smaller the likelihood of her mentioning personal integrity ($r = -.18$, $p = .019$) and the greater the likelihood of her mentioning obedience ($r = .27$, $p = .001$). It would seem that female respondents who abused their children were more concerned with raising children who did not compel the respondents to bend to their (the children's) needs and desires while non-abusing female respondents were more concerned that their children learn to value their own talents and feelings, i.e., develop self-respect.

TABLE 82: Most frequently occurring categories of traits which female respondents felt were important for their children to develop (N=150)

Trait Category	No. Respondents	Percent
Getting along well with others	91	60.7
Personal integrity	59	39.3
Self-sufficiency	42	28.0
Being educated	27	18.0
Developing skills, talent	25	16.7
Obedience	21	14.0
Staying out of trouble	14	9.3
Valuing money	3	2.0
Neatness	3	2.0

TABLE 83: Correlations among females between categories of traits felt important for children to develop and both perpetrator status and number of abuse incidents for the respondent (N=150)

Category of Trait	with Perpetrator Status	with No. Incidents
Obedience	.17 (p = .035)	.27 (p = .001)
Personal integrity	-.20 (p = .011)	-.19 (p = .019)
Self-sufficiency	.14 (p = .076)	NS

Similar results were obtained when the categories of traits were correlated with the number of incidents recorded for the family: The greater the number of incidents, the more likely was obedience to have been mentioned ($r = .17$, $N = 150$, $p = .028$), and the less likely was the development of skills to have been mentioned ($r = -.19$, $N = 150$, $p = .017$).

The frequencies with which male respondents cited the categories mentioned by female respondents are listed in Table 84. As with the females, getting along well with others and personal integrity were the two most frequently cited categories (49.2% and 44.6% of the respondents, respectively).

For the male respondents, the correlations involving categories with frequencies greater than 10 show that there is a trend toward significance in the relationship between number of abuse incidents recorded for the respondent and the frequency with which personal integrity was mentioned ($r = -.22$, $N = 65$, $p = .075$). Number of abuse incidents recorded for the respondent is also negatively related to the frequency with which getting along well with others (this includes being kind, understanding, and respecting others) was cited ($r = -.24$, $N = 65$, $p = .048$); the smaller the number of abuse incidents recorded for the respondent, the greater the likelihood that personal integrity and good relationships with others are noted by the respondent as important characteristics for his children to develop.

d. What are the perceived satisfactions to being a parent?

Respondents were asked to indicate whether they felt there were satisfactions to being a parent. Almost all, 93% of the female and 88% of the male, respondents answered affirmatively. Respondents answering in the affirmative were then asked to name these satisfactions. The frequency with which each of most frequently occurring categories of responses among female respondents was cited is given in Table 85. Watching the children grow, enjoying giving of oneself, having a guarantee against loneliness, and bringing one's own into the world were the four most frequently cited categories among female respondents, in that order.

TABLE 84: Frequency with which male respondents cited categories of traits which were important for their children to develop (N = 65)

Category of Trait	No. Respondents	Percent
Getting along well with others	32	49.2
Personal integirty	29	44.6
Being educated	25	38.5
Self-sufficiency	18	27.7
Developing skills, talents	10	15.4
Obedience	9	13.8
Staying out of trouble	4	6.2
Being aggressive, non-trusting	2	3.1
Valuing money	1	1.5
Neatness	1	1.5

TABLE 85: Most frequently occurring categories of satisfactions to being a parent among female respondents (N = 140)

Category of Satisfaction	No. Respondents	Percent
Watching children grow	32	22.9
Enjoying giving of oneself	27	19.3
Having a guarantee against loneliness	18	12.9
Bringing one's own into world, conceiving	16	11.4
Having children do things for parent	8	5.7
Liking babies	8	5.7
Fulfilling one's ambitions	3	2.1

Of these satisfactions, bringing one's own into the world was significantly and positively related to the number of abuse incidents recorded for the female respondent ($r = .17$, $N = 140$, $p = .038$).

e. What is the relationship between perceived strong points as a parent and the recurrence of abuse?

Respondents were asked what they felt their strong points as a parent were; these responses, up to three for each respondent, were then categorized. The frequencies with which the most frequently occurring categories were cited are given in Table 86.

Perpetrators were more likely to mention teaching ($r = .16$, $N = 150$, $p = .046$) than were non-perpetrators.

There were, in addition, positive correlations between the citing of spending time with the children and both the number of incidents recorded for the respondents ($r = .15$, $N = 150$, $p = .056$), and the number of incidents recorded for the respondent's family ($r = .15$, $N = 150$, $p = .056$).

f. What is the relationship between recurrence of abuse and expectations of children?

Since one of the theories about conditions associated with child abuse contends that abusive parents have unrealistic expectations of their children, respondents were asked to specify the age at which they would expect their children to be able to do each of a series of things.

Answers of female respondents were significantly correlated with the number of abuse incidents recorded for the family for three kinds of expectations: the age at which a child would be expected to (a) follow simple commands ($r = .18$, $N = 148$, $p = .024$); (b) begin to need discipline ($r = .21$, $N = 149$, $p = .008$); and (c) comfort the respondent when she was depressed or feeling upset ($r = .20$, $N = 136$, $p = .020$). Expectations for the age at which a child would be[illegible] was also significantly correlated with the number [illegible] for the respondent ($r = .20$, $N = 149$, $p = .01$[illegible] 21, $N = 149$, $p = .008$). The correlations were, ho[illegible] opposite to the predicted direction, since the gre[illegible] abuse incidents, the greater the likelihood that child[illegible] be older to be able to do these things. Perpetrators tend[illegible] en to begin to need discipline at an older age than non-[illegible]

[illegible] explanation for these findings is not clear. One pos[illegible] female perpetrators may have received more (casework and par[illegible] service designed to make them more aware of the need to avoid ove[illegible] ctions of their children.

TABLE 86: Most frequently occurring categories of perceived strong points as parents among female respondents (N = 150)

Category of Strong Point	No. Respondents	Percent
Providing material benefits	46	30.7
Love, kindness	31	20.7
Care, worry, understanding	22	14.7
Teaching, guiding children	17	11.3
Giving of oneself, being available	14	9.3
Spending time with children	14	9.3
Leading a "clean" life	4	2.7

4. Children's difficulties*

a. What types of difficulties do the children in abusive families manifest?

Respondents were asked to indicate whehter, in their view, any of their children have ever exhibited any of 36 difficulties. These difficulties included physical, social and emotional, learning, and infancy-related problems. The total number of difficulties cited per chidl was calculated, as well as subtotals for physical problems, infancy and learning problems, and social and emotional problems. Information was available on 472 children, based on the responses of 150 female heads. These children included 255 targets of abuse and 217 non-abused siblings.

Table 87a lists the means, standard deviations and ranges for the number of each of the categories of difficulties for targets and for non-targets. Means and S.D.'s for targets were consistently larger than for non-targets, and, with the exception of infancy-learning problems where the maximum score for the two groups was identical, the maximum score for targets was larger than for non-targets.

b. What is the relationship between children's difficulties and the recurrence of abuse?

Table 87b lists the Pearson correlation coefficients where target status was correlated with total number of difficulties and the three subtotal scores. Target children were perceived by the female heads to have significantly more difficulties generally than non-targets ($r = .20$, $p \leq .01$). The correlation between target status and number of physical problems was not significant ($r = .06$). A modest but significant correlation was found with number of infancy-learning problems ($r = .10$, $p \leq .05$), but a much stronger correlation was found with number of social-emotional problems ($r = .21$, $p \leq .01$).

To summarize, female heads described those children who were known via case record coding to be targets of abuse as generally exhibiting a greater number of problems, and specifically exhibiting more infancy-learning and more social-emotional problems.

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*This topic is treated in more detail in E. C. Herrenkohl and R. C. Herrenkohl, A comparison of abuse children and their non-abused siblings, accepted for publication by the Journal of the American Academy of Child Psychiatry.

TABLE 87 a: Descriptive statistics for number of perceived difficulties among targets and non-targets in families of 150 female respondents

Total No. Difficulties	Targets (N=255)	Non-Targets (N=217)
Mean	4.36	3.18
S.D.	3.07	2.24
Minimum	0	0
Maximum	17	12
No. Physical Difficulties		
Mean	1.15	1.01
S.D.	1.16	1.00
Minimum	0	0
Maximum	7	5
No. Infancy and/or Learning Difficulties		
Mean	1.10	.84
S.D.	1.30	1.14
Minimum	0	0
Maximum	6	6
No. Social or Emotional Difficulties		
Mean	2.11	1.32
S.D.	2.05	1.48
Minimum	0	0
Maximum	10	6

TABLE 87b: Pearson correlations between number of perceived difficulties and target status (N = 472)

Total No. Difficulties	r = .20**
No. Physical Difficulties	r = .06
No. Infancy or Learning Difficulties	r = .10*
No. Social or Emotional Difficulties	r = .21**

* $p \leq .05$

** $p \leq .01$

Since targets of abuse are not described as differing from their non-abused siblings in the number of physical problems, physical illness and handicaps (according to the mother's report) do not appear to be the source of the infancy or learning, or social or emotional problems by which they are distinguished from their non-abused brothers and sisters.

5. Parents' own childrearing

a. For how much of their childhoods did respondents live with their natural parents?

(1) Time lived with natural mother

Respondents were asked to indicate with whom they lived during the first 18 years of life. Approximately half the female heads and half the male heads lived with their natural mothers for the entire first 18 years of life. The amount of time of separation ranged from 3 months to 18 years for female heads and 1 to 18 years for male heads.

Of the 90 female perpetrators who were interviewed, 47 lived with their mothers until they were 18, without separations. The remaining 43 were separated from their mothers for a variety of reasons and lengths of time during the 18 years. The numbers of respondents giving each reason are outlined in Table 88. Up to three reasons per respondent were coded.

In the analysis of these data, the amount of time lived with the natural mother for the first three, first six, and first 18 years of life was correlated with a number of variables. One of these, whether or not the female respondent was a perpetrator of abuse according to the coding of the case records of these families, was significantly and negatively related to the amount of time she reported living with her natural mother: those female heads who were identified as perpetrators spent less time living with their natural mothers during the first six years of life than did those identified as non-perpetrators ($r = -.17$, $N = 149$, $p = .04$). There was a slightly weaker negative correlation between perpetrator status and time lived with natural mother for the first 18 years of life ($r = -.15$, $N = 149$, $p = .07$). The correlation between perpetrator status and time lived with natural mother during the first 3 years of life was, although negative, not significant ($p > .05$).

TABLE 88: Reasons why female respondents were separated from natural mothers during first 18 years of life (N = 150)

Reason	Perpetrators (N=90)		Non-Perpetrators (N=60)	
	No.	%	No.	%
Respondent married at early age	12	13.3	10	13.3
Mother did not want respondent	4	6.7	1	1.7
Respondent in corrective or treatment institution	4	4.4	0	1.7
Mother died	2	3.3	3	5.0
Respondent ran away from home	2	2.2	0	1.7
Economic reasons forced respondent to move out	2	2.2	1	1.7
Mother in prison	1	1.1	0	.0
Wanted to live with grandmother	0		1	
Left home at 16	1		0	
Put out of house	2		0	
Mother left father	2		1	
Parents separated	3		2	
Parents not around	1		0	
Parents unfit	1		0	
Reasons unknown	6		0	
TOTAL	43		17	

There were no significant correlations between time lived with natural mother and total number of abuse incidents for the respondent, or the number of abuse incidents for the respondent after the citation 1 case closing.

None of the three variables was significantly correlated with time the male respondents reported living with their natural mothers ($p > .05$).

(2) Time lived with natural father

Amount of time respondents lived with their natural fathers was analyzed separately. Thirty-seven of the 66 male respondents reported living with their natural fathers 14 or more years out of their first 18 years. Fifteen male respondents lived with their natural fathers 2 years or less. There were no significant correlations ($p > .05$) between amount of time lived with the natural father and perpetrator status, nor between the amount of time and total number of abuse incidents for the respondent.

The analyses for the female respondents, however, pointed to significant negative correlations between perpetrator status and amount of time female respondent reported living with her natural father during the first three years of life ($r = -.17$, $N = 148$, $p = .04$), the first six years of life ($r = -.21$, $N = 148$, $p = .01$) and the first 18 years of life ($r = -.17$, $N = 148$, $p = .04$). Female perpetrators spent significantly less time living with their natural fathers than did female non-perpetrators, with time lived with father during the age period birth to six years being the most strongly related to perpetrator status (see Table 89 for cross-tabulation of these variables).

The total number of incidents of abuse recorded for female respondents was also negatively related to the amount of time lived with the natural father for the first six years of life ($r = -.17$, $N = 148$, $p = .04$). The correlations between this variable and time lived with natural father for the first three years of life and first 18 years of life were negative but not statistically significant ($r = -.14$, $N = 148$, $p = .087$ and $r = -.13$, $N = 148$, $p = .111$, respectively).

The amount of time female respondents lived with their natural fathers during the first six years of life was cross-tabulated with the total number of incidents recorded for these respondents (see Table 90).

TABLE 89: Cross-tabulation of time female respondent lived with natural father during first 6 years of life and perpetrator status (N = 150)

Time (months)	Perpetrator		Non-Perpetrator		Total	
	Number	Percent	Number	Percent	Number	Percent
0	9	10.0	2	3.3	11	7.3
12	1	1.1	0	.0	1	.7
24	4	4.5	0	.0	4	2.7
36	4	4.5	0	.0	4	2.7
48	1	1.1	0	.0	1	.7
54	1	1.1	0	.0	1	.7
60	1	1.1	3	5.0	4	2.7
71	0	.0	1	1.7	1	.7
72	67	74.4	53	88.3	120	79.9
No answer	2	2.2	1	1.7	3	1.9
TOTAL	90	100.0	60	100.0	150	100.0

TABLE 90: Cross-tabulation of time female respondent lived with natural father during first 6 years of life and total number of incidents for the respondent (N = 150)

Months	Number of Incidents of Abuse			
	0	1	2 or 3	4 or more
0	2	6	2	1
12	0	0	0	1
24	0	0	1	3
36	0	2	1	1
48	0	0	0	1
54	0	1	0	0
60	3	1	0	0
71	1	0	0	0
72	53	26	22	19
No answer	1	0	2	0
TOTAL	60	36	28	26

To summarize, women who were categorized as perpetrators of abuse were less likely than non-perpetrators to have been raised in homes during their first six years of life where their natural fathers were long-term members of the household. These findings raise additional questions. For example, were the non-perpetrators of abuse who lived with their fathers during these first six years of life more likely to marry or live with violent male partners? Were these natural fathers perceived as abusive? Are more boys than girls the objects of abuse of these women, particularly if the father was seen as a violent or rejecting person? Since there were also significant correlations between perpetrator status and time lived with the natural mother during those years, are the same respondents involved?

More complicated analyses are required to answer these questions (see preface to this report).

b. From what size family did the respondents come?

The mean number of natural siblings for the total group of female respondents indicates that the respondents had an average of 4.1 natural siblings. The respondents tended to be, on the average, middle children with a mean of 2.5 children born to their mothers before the respondents were born and a mean of 2.4 children born after the respondents were born.

The number of children born to the mothers of the respondents before the respondents were born was cross-tabulated with indices of repetition of abuse for respondents. None of these cross-tabulations was significant; that is, the proportion of firstborn to later-borns among the non, moderate, and more chronic repeaters of abuse did not differ significantly for either female or male respondents. When respondents were categorized as perpetrators or non-perpetrators, the proportion of firstborns to later-borns again did not differ between the two groups, for females or males. (Approximately one-third of the perpetrators and of non-perpetrators were firstborns among both females and males.)

c. How "complicated" was the respondent's family background?

The respondents were also categorized according to the possession of "complicated" family backgrounds. This was defined as the

existence of half-siblings or step-siblings of the respondent; this would indicate a history of family break-up and regrouping with a new partner by one or the other natural parent of the respondent.

Whether or not the female respondent was categorized as a perpetrator was correlated, although not significantly, to the presence of "complications" in the family make-up ($r = .15$, $N = 147$, $p = .054$). More perpetrators tended to have step- or half-siblings, than did non-perpetrators (see Table 91 for cross-tabulation of these variables).

In addition, the presence of family background "complications" was positively although not significantly related to the total number of abuse incidents recorded for the respondent ($r = .15$, $N = 147$, $p = .054$).

d. How many of the respondents had been in foster homes as children?

Only seven of the 150 female respondents and three of the 65 male respondents indicated that they had been in foster homes during their first 18 years of life. A foster home was defined as a formal placement by a child welfare agency, as opposed to any family living situation outside the natural home. The number of foster placements ranged from one to 19 for the female respondents and from one to 6 for the male respondents. Among the male respondents, six of the seven who had been in foster homes were perpetrators of abuse according to incidents recorded in the case record.

TABLE 91: Cross-tabulation of presence of "complications" in female respondent's child-rearing and perpetrator status (N=150)

Were there any "Complications?"	Perpetrators	Non-perpetrators	Total
No	54	46	100
Row %	54.0	46.0	100.0
Column %	60.0	76.7	66.7
Yes	33	14	47
Row %	70.2	29.8	100.0
Column %	36.7	23.3	31.3
No answer	3	0	3
Row %	100.0	.0	100.0
Column %	3.3	.0	2.0

e. How much conflict was there in the respondent's family?

The respondents were asked about the amount of arguing that went on between the adult couples, with whom they lived as children. A significant correlation ($r = .25$, $N = 62$, $p = .05$) was found between perpetrator status and the degree to which frequent arguments between any adult caretaker couples of the male respondents took place: perpetrators were exposed to more arguing between adult couples than were non-perpetrators, according to their own perceptions.

There were no differences between perpetrators and non-perpetrators (males or females) as to the presence of physical conflict between adult caretaker couples, nor were their differences between perpetrators and non-perpetrators in the quality of relationship between adult caretaker couples (i.e., how well they got along).

None of these variables was significantly correlated with the numbers of incidents recorded for the respondent. One variable, whether any adult caretaker couples got along very well with one another, was correlated ($r = -.31$, $N = 28$, $p = .098$) with the numbers of citations after the case closing for male respondents. The "non-recidivists" more frequently indicated a very good relationship between adult caretaker couples.

f. What was the quality of the respondent's relationship with his or her own childhood caretakers?

Respondents were asked about the quality of their relationships with major caretakers in their lives, specifically, the amount of affection, pride, criticism, and attention directed toward them, and the degree to which they felt comfortable talking to the caretakers about important things in the respondents' lives. The amount of affection received did not distinguish between female or male perpetrators and non-perpetrators, nor did this variable have any significant association with the number of abuse incidents coded for female or male respondents.

There was a trend toward significance between the number of incidents recorded for a female respondent and the degree to which the respondent was unable to say that any significant caretaker seemed to be proud of her some

or most of the time ($r = -.14$, $N = 147$, $p = .08$). The number of citations for a female respondent was significantly related to the presence of an important caretaker that seemed to clearly not be proud of the respondent at least some of the time ($r = .17$, $N = 147$, $p = .03$). The amount of criticism perceived by the respondent to have been directed toward her was not significantly related to perpetrator status, number of abuse incidents, or number of citations.

The degree to which female respondents felt they had been ignored at least some of the time by a major caretaker was almost significantly related to the number of citations received ($r = .15$, $N = 143$, $p = .06$) though the correlation with number of incidents or perpetrator status was not significant ($r = .11$, $p = .19$ in both cases). In addition, the extent to which female respondents felt they lacked any important adult caretaker who did not ignore them at least some of the time was significantly associated with both number of abuse incidents and number of citations ($r = -.23$, $N = 143$, $p = .007$ and $r = -.21$ $N = 143$, $p = .015$, respectively). The more incidents, the more likely the respondent lacked a non-ignoring caretaker.

Finally, the degree to which female respondents felt they could talk to their caretakers about things that were important to the respondents did not have any significant relationship to number of incidents, number of citations, or perpetrator status.

Among the male respondents, none of these variables were significantly correlated with number of abuse incidents, number of citations, or perpetrator status. The only correlation with a trend in the significant direction was that between perpetrator status and the degree to which a male respondent felt a major caretaker had been critical toward him most of the time ($r = .21$, $N = 65$, $p = .093$): perpetrators tended to have a caretaker who was consistently critical more often than non-perpetrators.

g. Did the respondent feel himself or herself to be neglected or mistreated as a child or unable to explain his or her view of an incident in which caretaker got angry at respondent?

Respondents were asked if they felt they had been neglected or mistreated as children by their caretakers. Table 92 lists the percentages of the total male and female populations answering in the affirmative or negative, as well as the proportions of perpetrators and non-perpetrators among male and female respondents.

TABLE 92: Respondent's perception of being neglected, mistreated, and unable to explain his or her view of incidents

	% of Female Respondents (N=150)	% of Female Perpetrators (N=90)	% of Female Non-Perp. (N=60)	% of Male Respondents (N=65)	% of Male Perpetrator (N=50)	% of Male Non-Perp. (N=15)
Did you feel neglected as a child?						
No	58.7	54.4	65.0	61.5	60.0	66.7
Yes	40.7	44.5	35.0	33.9	34.0	33.3
No answer	.6	1.1	.0	4.6	6.0	.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
Did you feel mistreated as a child?						
No	71.3	67.8	76.7	76.9	72.0	93.3
Yes	26.7	30.0	21.7	21.6	26.0	6.7
No answer	2.0	2.2	1.6	1.5	2.0	.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
Did you get a chance to explain your view of incidents?						
Never or rarely	39.4	36.7	43.3	24.6	26.0	20.0
Some or most of time	60.0	62.2	56.7	73.9	72.0	80.0
No answer	.6	1.1	.0	1.5	2.0	.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Forty and seven tenths percent of the female respondents and 33.9% of the male respondents felt they had been neglected as children by their caretakers. For both males and females, a higher proportion of the perpetrators felt they had been neglected than of non-perpetrators, but in neither case was the difference statistically significant. The most frequently mentioned examples of neglect were not being loved or wanted, not being given any attention or physical care, and being singled out among the children for fewer privileges or less love.

Twenty-six and seven tenths percent of the female respondents and 21.6% of the male respondents felt they had been mistreated as children by their caretakers. Larger proportions of perpetrators felt they had been mistreated than of non-perpetrators. The proportion of male perpetrators and non-perpetrators tended towards significance ($r = .20$, $N = 64$, $p = .103$).

Table 93 indicates that 10 of the 14 male respondents who felt they were mistreated as children cited physical abuse as the kind of mistreatment received. Nine of the 14 were among those who felt they had been neglected.

The number of incidents recorded in the case record for female respondents was significantly associated with the perception of having been mistreated as a child ($r = .18$, $N = 147$, $p = .031$); the more abuse incidents recorded, the greater the likelihood the respondent felt she had been mistreated as a child.

Among the 40 female respondents who described being mistreated, 21 described being physically abused, two described being sexually abused, 12 described being singled out among siblings for less love or more work or blame, and 13 described not being given enough love or attention. A respondent could have given more than one illustration and thus be scored in more than one category.

TABLE 93: Frequency with which respondents described different types of mistreatment as children

Types of Mistreatment Described by Females (N = 40)	No.
Beaten	21
Restricted (refusals, activities)	4
Irrational expectations	8
Singled out among siblings for more work or blame, less love	12
Ignored, not enough attention or love	13
No communication or relationship	1
Sexual abuse	2

Types of Mistreatment Described by Males (N = 14)	
Beaten	10
Irrational expectations	2
Ignored, not enough attention or love	2

The cross-tabulation of these variables (see Table 94) indicates that 13 of the 14 male respondents who reported feeling mistreated as children were also perpetrators of abuse. Approximately four times as many perpetrators as non-perpetrators reported feeling mistreated.

Twenty-four and six tenths percent of the males and 39.4% of the females felt they were never or rarely given a chance to explain their view of the incident where caretakers were angry with them. A slightly higher proportion of male perpetrators than male non-perpetrators said they were given a chance to explain rarely or never, though this was not a statistically significant difference. In the case of the female respondents a slightly higher proportion of non-perpetrators than of perpetrators said they were given opportunities to explain their views only rarely, if ever.

h. Does the respondent have any recurring dreams?

Twenty-two male respondents described recurring dreams. For five respondents, the nature of the theme of the recurring dream was unclear. The dreams of nine respondents involved themes of aggression and destruction and, with the exception of two dreams (the death of a sibling and shooting of an animal), all involved destruction directed toward the respondent, or toward the world as a whole, of which the respondent was a part. Many of the dreams depicting aggression could be interpreted as reflecting feelings of guilt or anxiety on the part of the dreamer. In addition, eight respondents had recurring dreams which depicted overt guilt or anxiety (see Table 95).

If recurring dreams can be said to reflect enduring preoccupations of the dreamer, it would seem that anxiety and guilt are preoccupying feelings for a number of the male respondents. Seventeen of those who report recurring dreams are perpetrators (one-third of the 51 perpetrators) and five are non-perpetrators (one-third of the 15 non-perpetrators).

TABLE 94: Cross-tabulation of perpetrator status with perception of mistreatment by male respondents (N = 65)

Did you feel mistreated as a child?	Perpetrator		Non-Perpetrator		Total	
	Number	Percent	Number	Percent	Number	Percent
No	36	72.0	14	93.3	50	76.9
Yes	13	26.0	1	6.7	14	21.5
No answer	1	2.0	0	.0	1	1.6
TOTAL	50	100.0	15	100.0	65	100.0

TABLE 95: Content of recurring dreams among male respondents (N = 22)

Aggression	Number of Perpetrators	Number of Non-perpetrators
Respondent in electric chair	1	0
Atomic bomb falling and separation from family	1	0
Respondent drowning	1	0
Respondent in army	1	0
Respondent being hit by car	0	1
End of the world	1	0
Respondent shooting at animal	1	0
Death of respondent's sibling	0	1
Respondent's father chasing him with hatchet	0	1
Anxiety, guilt		
Respondent falling, being chased	5	0
Respondent bending down for mercy before Christ	0	1
Respondent talking to dead parent	2	0
Miscellaneous		
Being a pilot, flying	2	0
Seeing dead grandmother	1	0
Horrible things that happened to respondent as a child	1	0
Shadow coming toward respondent	0	1

6. Use of community resources

These results can be summarized by saying that the relationship between repetition of abuse and use of community resources (according to female heads interviewed) is weak. There is no indication of greater social isolation on this index among families who repeat abuse as compared to those who don't, and, on the dimension of participation in work-related organizations, "repeaters" indicate more participation than "non-repeaters" ("repeaters" here refers to families with more than one citation).

Interview data with male heads indicates greater use of summer programs by children in families with greater numbers of incidents on their record. This may be encouraged by social service agencies as a way of helping remove the children (in more abusive families) from the home for some part of the day. As in the data from female heads, there is little support for the hypothesis of greater social isolation on this particular index among the more frequently abusing parents.

7. Services

a. What is the relationship between selected demographic characteristics and months of casework service from the child welfare agency?

Table 96 lists the correlations between total number of months of service to the family at the time of the case record coding and selected demographic variables. Using the female interview data, significant positive relationships were found between months of service and the respondent's having attended special education classes ($r = .27$, $p \leq .01$). Number of months of service was found to be negatively related to the respondent's attending religious services at the time of the interview ($r = -.17$, $p \leq .05$).

Using the female interview data, there is a significant correlation between months of service and years of education completed by the male heads ($r = -.24$, $p \leq .05$).

TABLE 96: Correlations between months of service and selected demographic variables as reported by female heads

Characteristics	Females	Males
Years of education completed	-.14 (N=151)	-.24* (107)
Attendance at special education classes	.27** (151)	.17 (95)
Age at time of interview	-.01 (151)	.02 (121)
Current attendance at religious services	-.17* (151)	-.34 (100)
Attendance at religious services at time of first citation	-.06 (149)	-.28 (100)

* $p \leq .05$

** $p \leq .01$

b. What is the relationship between months of service and income level at the time of the interview?

According to the female interview data, the number of months of service received by the family is negatively related to income level ($r = -.26$, $N = 151$, $p = .001$), and positively related to the family's receiving public assistance funds at the time of the interview ($r = .24$, $N = 151$, $p = .003$). More casework service is directed toward the poorer families on welfare.

c. What is the relationship between months of casework service from the child welfare agency and amount of time lived with natural mother?

Total months of service received by the female respondent's family was significantly related to the amount of time she reported living with her natural mother in the first three years of life ($r = -.18$, $N = 148$, $p = .021$), the first six years of life ($r = -.21$, $N = 148$, $p = .01$), and the first 18 years of life ($r = -.17$, $N = 148$, $p = .035$). The amount of time male respondents reported living with their natural mothers was not significantly correlated ($p > .05$) with months of service.

d. What is the relationship between months of service and whether a respondent would raise the children differently than the respondent was raised?

Months of service to the family was negatively correlated with the female respondents' answers to this question ($r = -.17$, $N = 150$, $p = .029$).

e. What is the relationship between stresses on the family and months of service received?

Total months of service from the child welfare agency was found to correlate significantly and positively with the number of different types of stresses reported by the female respondents for the time of the interview and the first citation considered together ($r = .21$, $N = 151$, $p \leq .01$). Total months of service was also analyzed for its relationship to each stress individually (see Table 97). For the female interview data, significant positive relation-

TABLE 97: Correlation of stresses (present and past) with months of service

	Stresses as Reported by Female Respondents (N=151)		Stresses as Reported by Male Respondents (N=66)	
	Now	Past	Now	Past
Insufficient income	.17*	.08	.22	.15
Unemployment	-.07	.05	.01	.09
Other economic problems	-.03	-.08	-.12	-.14
Crowding in home	-.01	.09	.15	-.02
Lack of home conveniences	-.02	.14	.02	.01
Distance from community services	.00	.03	.01	-.12
Frequent family moves	.10	.31**	-.12	-.12
Other housing problems	.05	.15	.13	.08
Conflict with neighbors	.18*	.20*	.00	.11
Crowding in neighborhood	.05	.14	.14	.09
Crime in neighborhood	.13	.07	.12	.27*
Other neighborhood problems	.02	.11	.01	-.06
Break-up of family	.20*	.06	-.21	-.08
Pregnancy	-.10	.12	-.04	-.14
Marital conflict	.02	.06	-.09	.06
Dissatisfying marital relationship	.04	.09	-.02	.09
Problems with other adults in home	.05	.26**	***	.04
Problem children	.15	.08	.02	.13
Behavior in school	.07	.06	.02	-.06
Other problems with children	.02	.00	.04	.13
Bill collectors	.19*	.19*	-.09	.04
Trouble with police	.11	.13	-.04	.29*
Other legal concerns	.11	-.06	-.27*	.02
Responsibilities of parenting	-.07	.10	-.08	.03
Language barriers	-.02	-.02	.07	.08
Loneliness	.05	-.04	-.07	.12
Lack of friends	.00	.11	-.10	.04
Unfulfilled ambitions	.02	-.06	.00	-.04
Other personal problems	-.07	.01	-.09	-.12
Conflict with relatives	.26**	.26**	-.19	.04
Too much agency involvement	.09	.13	.02	.12
Problems with non-family adults	-.09	-.08	.00	.09
Chronic fatigue	.06	.05	.09	.05
Physical illness	.16*	.01	.14	.03
Mental illness	.13	.05	.03	.08
Retardation	.25**	.21**	.27*	.27*
Alcohol use	.02	.11	-.12	-.03
Drug use	.01	-.13	***	.00
Other health problems	.00	-.13	-.02	-.10

* $p \leq .05$

** $p \leq .01$

*** uncomputable

ships were found with current stress due to insufficient income ($r = .17$, $p \leq .05$), conflict with neighbors ($r = .18$, $p \leq .05$), break-up of the family ($r = .20$, $p \leq .05$), bill collectors ($r = .19$, $p \leq .05$), conflict with relatives ($r = .26$, $p \leq .01$), physical illness ($r = .16$, $p \leq .05$), and retardation ($r = .25$, $p \leq .01$); there were also significant positive relationships with stress at the time of the first citation due to frequent family moves ($r = .31$, $p \leq .01$), conflict with neighbors ($r = .20$, $p \leq .05$), problems with other adults in the home ($r = .26$, $p \leq .01$), bill collectors ($r = .19$, $p \leq .05$), conflict with relatives ($r = .26$, $p \leq .01$), and retardation ($r = .21$, $p \leq .01$).

For the male interview data, total months of service to the family was significantly and positively related to current stress due to retardation ($r = .27$, $p \leq .05$), but significantly and negatively related to current stress due to legal problems ($r = -.27$, $p \leq .05$). Male respondent data also indicated significant positive relationships ($p \leq .01$) between total months of service and stress at the time of the first citation due to crime in the neighborhood ($r = .27$), trouble with police ($r = .29$), and retardation ($r = .27$).

Table 98 lists the correlations between the stress factor scores derived from both the female and male interviews and months of service. Total months of service is positively correlated with amount of stress perceived by female respondents on Factor II (Adequacy of income) in the Past ($r = .16$, $p \leq .05$), Factor IV (Legal and physical problems) Now ($r = .19$, $p \leq .05$), Factor VI (Conflict with others) in the Past ($r = .23$, $p \leq .01$) and Now ($r = .26$, $p \leq .01$), and Factor VII (Neighborhood problems) Now ($r = .18$, $p \leq .05$).

f. What is the relationship between months of service and improvement in stress?

Table 99 lists the correlations between months of casework service and improvement on each of the seven stress factors. The only significant

TABLE 98: Correlations between stress factor scores and months of service

Factor			Stresses As Reported by Females (N=151)	Stresses As Reported by Males (N=66)
I.	Marital conflict	(past)	.09	.06
		(now)	.08	-.14
II.	Adequacy of income	(past)	.16*	.02
		(now)	.04	.00
III.	Social relationships	(past)	.00	.04
		(now)	.07	.12
IV.	Legal and physical problems	(past)	-.05	.05
		(now)	.19*	-.07
V.	Problems of parenting	(past)	-.03	.04
		(now)	.06	-.02
VI.	Conflicts with others	(past)	.23**	.20
		(now)	.26**	-.10
VII.	Neighborhood problems	(past)	.15	.16
		(now)	.18*	.09

TABLE 99: Correlations between the difference between past and present stress factor scores and months of service

		Stresses As Reported by Females (N=151)	Stresses As Reported by Males (N=66)
I.	Marital conflict	.02	.15
II.	Adequacy of income	.12	.01
III.	Social relationships	-.08	-.05
IV.	Legal and physical problems	-.22**	.11
V.	Problems of parenting	-.08	.05
VI.	Conflict with others	.01	.27*
VII.	Neighborhood problems	-.03	.07

* $p \leq .05$

** $p \leq .01$

correlation among those involving data derived from female respondents is a negative one between months of service and Factor IV (legal and physical problems) ($r = .22$, $p \leq .01$). In large part, this negative correlation probably reflects legal battles over foster placement of the children. Among the correlations involving data derived from male respondents, however, there is a significant relationship between months of service and diminution of stress related to Factor VI (Conflict with others) ($r = .27$, $p \leq .05$).

C. Hospital birth records

Permission was sought from parents who were interviewed to read and code birth record data for all the children in the family. A coding form was drawn up with consultation from Dr. M. Kokosky, Neonatologist at Mount Carmel Mercy Hospital in Detroit, Michigan. A copy of the coding form is included in Appendix D.

All records in local hospitals were read and coded by members of the research staff, and letters were sent to out-of-town hospitals requesting the appropriate information. In the following analyses, the records coded represented 314 children from 97 different families. One hundred forty-five of these children were identified as targets of abuse through the coding of the child welfare agency case records.

1. Relationship between birth record variables and target status.

In the first set of analyses, the identification of a child as a target or non-target was correlated with each of the birth record variables. The results are listed in Table 100.

Contrary to predictions, abnormalities of delivery or baby did not predict target status (when type of abuse is ignored). On the other hand, mother's age was negatively correlated with the child's subsequent identification as a target of abuse ($r = -.12$, $N = 312$, $p \leq .01$). The children born to mothers younger than 20 were compared to those born to mothers over 20 as far as subsequent abuse of the child was concerned. Again, the correlation with target-status of the child was significant ($r = .20$, $N = 312$, $p = .001$), and

TABLE 100: Correlations of target status and birth record variables

Birth Record Variable	Correlation with Target Status	N on Which Correlation Based
Weeks gestations	.09	248
Gestational period less than 36 weeks	.14**	314
Mother's age	-.12*	312
Mother's age less than 20	.20**	312
First Apgar score	.05	184
Pregnancy problems	-.03	314
Breech birth	-.15**	314
Caesarian delivery	.01	314
Other delivery problems	.04	314
Abnormalities of baby	-.10	314
Respiration problems at birth	.00	314
Jaundice	.03	314
Other abnormalities of baby	.07	314
Bottle vs. breast feeding	.01	295
Baby's weight at birth	.10	314

* $p \leq .05$

** $p \leq .01$

larger than the correlation obtained using the entire range of mother's ages. Thus, among these families, children born to teenage mothers are at greater risk for subsequent abuse.

In addition, premature birth (gestation period less than 36 weeks) was found to be significantly related to target status of the child ($r = .12$, $p = .009$). Children born prematurely were in greater jeopardy of subsequent abuse.

An unexpected finding was that breech births were negatively related to subsequent abuse of the child ($r = -.15$, $N = 312$, $p = .004$). Of the nine breech births in these records, not one of these children was a subsequent target of abuse. One possible explanation which requires further study could be that in the case of breech births, the delivery is typically performed with no (or very minimal) anesthesia. Perhaps the immediate bond that is established between mother and child is a stronger one in these cases and is effective in protecting the child from subsequent abuse.

The influence of the bonding between mother and newborn may also be important in explaining the finding noted above that children born prematurely were more likely to become subsequent targets of abuse than full term babies. Premature babies are more likely to be separated from their mothers in isolettes during the first days of life, a phenomenon which others (Klaus and Kennell) have noted to be associated with poorer bonding between mother and child.

In future analyses, type of abuse incidents coded for each target will be correlated with the birth record variables of that target*.

2. Relationship between problems at birth and selected variables.

In a second set of analyses, birth record variables for all children in a family were analyzed as a set. (An additional family had been coded at the time these analyses were done for a total of 98 families). Table 101 gives the frequencies of these summed variables, and Table 102 gives the correlation matrix for these summed variables. The number of targets in a family correlates significantly only with the number of children in the family

*A paper which reflects these further analyses is E. C. Herrenkohl and R. C. Herrenkohl, A comparison of abused children and their non-abused siblings, accepted for publication by the Journal of the American Academy of Child Psychiatry.

TABLE 101: Frequencies of selected birth record variables

Summed across Children in Family (98 Families)

Number of Children in Family		Number	Percent
1		14	14.3
2		22	22.5
3		25	25.5
4		14	14.3
5		15	15.3
6		5	5.1
7		1	1.0
9		2	2.0
Total		98	100.0
Difference in days to discharge between mother and child	None (or unknown)	96	98.0
	1 Birth	1	1.0
	2 Births	1	1.0
	Total	98	100.0
Premature births	None	88	89.8
	1 Birth	10	10.2
	Total	98	100.0
Mother younger than 20 years old when child born	None	46	46.9
	1 Child	34	34.7
	2 Children	12	12.3
	3 Children	6	6.1
	Total	98	100.0
Apgar score less than 8	None	85	86.7
	1 Child	12	12.3
	2 Children	1	1.0
	Total	98	100.0
Pregnancy problems	None	85	86.7
	1 Child	11	11.3
	2 Children	2	2.0
	Total	98	100.0
Breech births	None	93	94.9
	1 Birth	3	3.1
	2 Births	1	1.0
	3 Births	0	0.0
	4 Births	1	1.0
	Total	98	100.0

(Continued on next page)

TABLE 101 (Continued)

	Number of Children	Number	Percent
Caesarian deliveries	None	91	92.9
	1 Delivery	4	4.1
	2 Deliveries	2	2.0
	3 Deliveries	1	1.0
	Total	98	100.0
Other delivery problems	None	55	56.1
	1 Delivery	34	34.7
	2 Deliveries	7	7.2
	3 Deliveries	2	2.0
	Total	98	100.0
Abnormalities of baby	None	80	81.6
	1 Child	17	17.4
	2 Children	1	1.0
	Total	98	100.0
Infant Respiratory problems at birth	None	79	80.6
	1 Child	17	17.4
	2 Children	2	2.0
	Total	98	100.0
Infant:Jaundice at birth	None	84	85.7
	1 Child	10	10.2
	2 Children	4	4.1
	Total	98	100.0
Other abnormalities at birth	None	45	45.9
	1 Child	30	30.6
	2 Children	20	20.4
	3 Children	3	3.1
	Total	98	100.0
Feeding technique	All children in family breast fed:	7	7.2
	Bottle Fed:		
	1	18	18.4
	2	23	23.5
	3	16	16.3
	4	19	19.4
	5	11	11.2
	6	1	1.0
	7	1	1.0
	9	2	2.0
	Total	98	100.0
Weight at birth	All 5 Pounds or Above	90	91.8
	1 Below 5 Pounds	8	8.2
	Total	98	100.0

for whom birth record data were available and with bottle feeding. The latter correlation is basically a reflection of the number of children for whom data were collected since almost all the children were bottle fed.

As can be seen in this table, the more babies a mother had while still in her teens, the more likely the babies were born weighing less than 5 pounds and having abnormalities.

Increased numbers of babies with gestational ages of less than 36 weeks were correlated with increased numbers of breech births* and abnormalities of the baby as well as birth weights of less than 5 pounds.

The more pregnancies with problems, the more frequently were infant abnormalities noted in the records.

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*It was previously noted that breech birth was negatively related to subsequent abuse while premature birth was positively related to subsequent abuse. The apparent contradiction of the positive relationship between breech birth and premature birth may be related to the small numbers involved (9 breech births; 10 premature births). Further analyses will be done on these data.

3. The relationship between birth record variables and the recurrence of abuse.

Table 103 lists the correlations between the summed birth record variables for the families and citations for abuse for the families. The number of children in the family for whom birth record information was obtained was negatively correlated with number of citations received by the family, but positively correlated with numbers of abuse incidents recorded for the family. (See table 104 for correlations of summed birth record variables with incidents of abuse).

None of the summed variables was significantly correlated with number of incidents of emotional abuse or of physical abuse with the exception of bottle feeding.

Two summed variables were significantly correlated with sexual abuse incidents: total number of children for whom birth records were coded, and number of children born with some kind of abnormality. One possible interpretation of these correlations is that sexual abuse of children may be more likely to occur in families where the female head may have negative feelings about engaging in sexual relations due to fears of having more children because of a large family already produced, or fears of having more children with abnormalities.

The number of neglect citations (citations for gross or life-threatening neglect) was significantly correlated with the number of children in the family who had Apgars of less than 8 at birth. The number of serious neglect incidents in the family case records was significantly correlated with the number of children in the family who were in the hospital longer than seven days from birth. These indices suggest that babies who may be a care problem in the first weeks of life may be more likely to be involved in gross neglect incidents than healthy babies. In addition, there was a positive correlation with a trend toward significance between numbers of serious neglect incidents and numbers of children born to the mother before she was 20. This combination of correlations with neglect incidents may reflect as much about the difficulty of caring for such babies as about the competence of the caretaking person. In other words, families who are described as abusing their children through gross neglect may frequently have inexperienced young mothers and babies who present serious care problems.

TABLE 103: Correlations of summed birth record variables with citations for abuse (N = 98 families)

Number of Children	Number of All Citations	Number of Citations for Physical Abuse	Number of Citations for Sexual Abuse	Number of Citations for Neglect
In a Family	-.19*	-.03	-.02	-.15
With More than 7 Days to Discharge	.00	.04	-.02	-.05
With Less than 36 Weeks Gestation	-.06	-.12	-.05	-.05
With Mother Less than 20 Years Old	-.02	.00	-.15	-.10
With Apgar Less Than 8	-.03	-.14	-.06	.20*
With Mother Having Pregnancy Problems	-.04	-.10	.22*	-.03
With Breech Birth	-.06	.00	-.03	-.07
With Caesarian Birth	-.00	.00	-.04	-.09
With Mother Having Delivery Problems	-.13	-.07	.11	-.10
With Abnormalities	.04	.06	.05	-.11
With Respiration Problems	-.04	-.02	-.08	.01
With Jaundice Problems	-.03	-.01	-.06	.03
With Other Abnormalities	-.02	-.04	.03	.00
With Bottle vs. Breast Feeding	-.12	.00	-.01	-.11
With Weight Less Than 5 Pounds	-.04	-.08	-.05	-.03

* $p \leq .05$

** $p \leq .01$

TABLE 104: Correlations of summed birth record variables with incidents of abuse (N = 98 families)

Number of Children	Total No. of Incidents	No. of Physical Abuse Incidents	No. of Emotional Abuse Incidents	No. of Sexual Abuse Incidents	No. of Neglect Incidents
In a Family	.23*	.16	.08	.25**	.09
With More than 7 Days to Discharge	.05	-.06	.07	-.03	.19*
With Less than 36 Weeks Gestation	-.09	-.08	-.14	-.08	-.04
With Mother Less than 20 Years Old	.16	.08	.07	-.05	.16
With Apgar Less than 8	.07	.08	-.12	-.09	.12
With Mother Having Pregnancy Problems	-.17	-.15	-.12	.00	-.09
With Breech Birth	-.01	.03	-.05	-.04	-.04
With Caesarian Birth	-.05	.00	-.10	-.06	-.12
With Mother Having Delivery Problems	-.07	-.04	-.13	.01	-.02
With Abnormalities	.18	.16	-.08	.23**	.06
With Respiration Problems	.06	.05	-.09	.06	.08
With Jaundice Problems	-.01	.00	-.06	.07	-.02
With Other Abnormalities	.11	.09	-.02	.05	.06
With Bottle vs. Breast Feeding	.31**	.25**	.06	.24**	.14
With Weight Less than 5 Pounds	-.18	-.18	-.12	.00	-.09

* $p \leq .05$

** $p \leq .01$

IV. Summary

A. Focus: the recurrence of abuse

This summary of research results focuses on the issue of the recurrence of abuse and its meaning for the families, the perpetrators, and the children. The goals of the research were: (1) to identify the recurrence of abuse; (2) to determine what conditions relate to recurrence, and (3) to identify factors which alleviate conditions which are related to recurrent abuse.

In the recurrence study, we conducted a follow-up of 328 families who were provided with services for child abuse in Lehigh and Northampton Counties (Pennsylvania) during the period 1967-1976. The follow-up included three parts: (1) an analysis of the case records of all 328 families; (2) interviews with one or both (original) heads of household who could be located and would agree to the interview (151 female and 66 male heads of household); and (3) an analysis of the birth records of children in the (interviewed) families where the parent would give permission to read the record.

The issue of recurrence is important because child abuse recurs frequently. In fact, it is the repetition of abuse that leads to the most serious injury of the child.

B. Different ways of looking at recurrence

1. Citations vs. incidents

In examining the recurrence of abuse, several distinctions are necessary. For example, we found that we needed to distinguish between "citations" (which in Pennsylvania are the formal charges of child abuse) and incidents. Incidents, coded from the case record, are identical in severity to those incidents listed in citations, but many have in fact not been formally indicated in citations. Considered from this standpoint, there was a total of 349 citations to families with at least one valid citation (N = 260) during the time period studied, but 807 reasonably certain incidents of abuse in these same families. Since some families had not received a validated citation but had at least one reasonably certain incident (according to the case record), there were in fact 286 families who had a total of 903 reasonably certain incidents.

Obviously, with 286 abusive families, i.e., those in which there was at least one recorded incident, and 903 incidents, many families have repeated incidents of abuse. While 28.7% of the families have more than one citation, 66.8% of these same families have more than one recorded incident of abuse.

2. Parties to the abuse

When one focuses on the perpetrators of abuse in these 286 families, a total of 404 were identified. There is a lower rate of recurrence for individual perpetrators 197; (49%) were involved in two or more incidents of abuse. The recurrence rate for individual perpetrators is below the rate for families because in almost half (44.8%) of the families, there was more than one perpetrator.

Turning to the children, we found that in the same 286 families there were 511 children who were targets of abuse. Among these 49.5% had been abused more than once. Again, this is below the rate of recurrence for families because, often, more than one child in a family is abused. In 46.5% of these families, more than one child is involved.

3. Types of abuse

We found that 90.5% of the 286 families are involved in physical abuse; 14.7%, emotional abuse; 9.4%, sexual abuse; and 28.3%, neglect. The case records show that 54% of the families involved in physical abuse are involved in more than one incident of abuse, 21% of those involved in emotional abuse have more than one incident; 30% of those involved in sexual abuse are involved in more than one incident, and 44% of those involved in gross neglect have more than one incident. One needs to be cautious in interpreting these results, since the likelihood of an "incident" being identified and entered in the case record differs, depending on the type.

4. Types of abuse in different families

Another way to look at recurrence is to examine the different types of abuse with which the families are associated. About two-thirds (65%) of the 286 families were involved in just one type of abuse. Most of these (86%) were exclusively involved in physical abuse. This means that one-third of the 286 families were found to be involved in more than one type of abuse. By definition, these latter involve recurrent abuse in that there was more than one incident. However, allowing for the first incident of each type,

where there is a single type the average* repeat rate is 52%; where there are two types of abuse, 66%, and where there are three types, 85%.

The more dramatic point of these findings is the amount of repeated abuse in these families. However, it is equally important to note certain differences that exist. In some families there is only a single type of abuse; in others there are several types of abuse involved. In some families, there is one perpetrator; in others, more than one. In some families one child is a target, while other families have more than one target child.

Thus, whether there is repeated abuse or not represents only one dimension of the abused child's family environment. Other dimensions are the number of adults who are abusers, the number of siblings who are also abused, and the different types of abuse that occur. It is possible that the grave consequences for the child may result as much from one or another of these latter factors as they do from the repeated abuse.

5. Recidivism: recurrence of abuse after intervention

The preceding sections have considered the occurrence of repeated abuse. A more limited definition is repeated abuse which occurs after the termination of treatment services intended to prevent the recurrence of abuse. By "recidivism" we mean an incident of abuse that occurs after a case, opened to serve an abusive family, is closed.

We found that among the 286 families with at least one incident, 206 (72%0 had their cases closed. Of these, 84 (40.8%) had had their cases reopened at the time the case record was read. Of the 84 families, 38 had at least one more incident of abuse. This number represents 45% of the reopened cases and 18.4% of the closed cases.

Among 404 perpetrators in the 286 families with at least one abuse incident, cases involving 279 (69%) were closed and of these, cases involving 120 (43%) were reopened. Where the case was reopened, 45 (37.5%) perpetrators had at least one more abuse incident recorded. This number represents 16% of closed cases.

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*The average rate is used because there are different rates, depending on which combination of two or three types of abuse is used.

Among the 511 targets of abuse in the 286 families, 344 are in families where the case was closed. Of these, 168 (48.8% were in families where the case was reopened and among these, 60 were in families where at least one more incident of abuse occurred. This number is 17.4% of targets in closed cases, and 35.7% of targets in closed and reopened cases.

6. Abuse prior to first citation

Another perspective from which the recurrence of abuse can be considered is the occurrence of abuse prior to the incident associated with the first citation. Among the 286 families with at least one verified incident, 99 (34.6%) were known to have had prior abusive incidents. Some of these prior incidents, it is important to note, occurred before the current system of abuse citations was instituted, and thus could not involve citations. Still other prior abuse was identified when the first citation was investigated.

C. Demographic characteristics of the families

Of the female heads interviewed, 83% are white, 12% are Spanish-surnamed, and 5% are Black. Over half (62%) are Protestant, almost one-quarter (24%) are Roman Catholic, and less than one percent are Jewish. Two-thirds (66%) had less than 12 years of education. Twelve percent had been in some type of special education. A lower percentage of male heads (50%) had less than twelve years of education; 11% were known to have been in special education classes. For both the males and females there was a negative, non-significant relationship between years of education and recurrence of abuse.

Most (86%) of the 328 families had both a male and a female head of household. These two-parent families were more likely to be cited for physical abuse more than once ($r = .21$); more likely to have recurrent incidents of abuse ($r = .11$), particularly physical abuse ($r = .13$); and these families were more likely to have one or more children placed outside the home for protection from abuse ($r = .22$).

No correlation was found between the number of members in a family and recurrent abuse. However, a significent negative correlation ($r = -.17$) was found between income level at the time of the interview and the number of abuse incidents for the family. This is to say, the higher the income level, the fewer the abuse incidents.

D. Level of violence in the families

Violence in these families does not always take the form of child abuse. Of the 2,651 incidents of conflict or violence* recorded for the total 328 families, 365 incidents involve adult family members as victims. Nearly half (44%) of the 328 families had one or more incidents of conflict recorded which involved adult family members. Approximately one-fourth (24%) had more than one incident of conflict with adult family members.

Beatings severe enough to leave bruises were the most frequently used method of violence towards adult family members in the 328 families. Beating of adults occurred in a total of 83 families, or 25.3% of the 328 families. Assaults, abusing allegations, or threats to kill occurred in 20 families or 6.1% of the sample. Suicide attempts were made in 16 families or 4.9% of the sample, and actual suicides occurred in 3 families, or 0.9% of the families. Choking or strangling occurred in 7 families, attempted use of knife or hatchet occurred in 5 families, stabbings occurred in 5 families, and shootings occurred in 3 families.

If, then, roughly half of the child-abusive families have also been involved in incidents of abuse toward adult family members, and nearly half of these families have more than one such incident, what is the relationship between the recurrence of child abuse and other types of family conflict? The greater the frequency of child abuse, the greater the frequency of violence toward adult family members ($r = .28$), and the greater the variety of abusive methods used toward adult family members ($r = .27$).

It would appear that for some families, child abuse is not a special phenomenon but rather a continuation of the violence in their lives. During the early part of the study, the research staff noted that the names of some of the subjects in the study appeared in the local newspapers in connection with other violent episodes. These names have continued to reappear.

E. Stresses on the families

1. Individual stresses

As part of the interview, respondents were asked about stresses on the family both at the time of the interview (current) and at the time of the first citation for abuse (past). The total number of citations for a family is correlated with current stresses due to bill collectors ($r = .21$), legal problems ($r = .20$), too much social service agency involve-

*This involves a broader definition than that used for abuse "incident" throughout this report.

ment in the family's life (r = .33); and with problems at the time of the first citation due to frequent family moves (r = .21), too much agency involvement in the family's life (r = .16), and school behavior of the children (r = -.19).

The total number of incidents for the family is significantly ($p \leq .05$) correlated with total number of stresses mentioned by the female respondents for either point in time (r = .16). The number of incidents is related to current problems due to frequent family moves (r = .17), breakup of the family (r = .24), too much agency involvement in the family's life (r = .21), and trouble with police (r = .19); it is significantly correlated with stress at the time of the first citation due to frequent moves of the family at that time (r = .34), lack of friends (r = .19), problems with other adults in the home (r = .17), and bill collectors (r = .19), and lack of friends (r = .19).

Frequent moves by the family appear to be a chronic source of perceived stress for families with many incidents of abuse. The pressure of bill collectors -- also cited as a stress by families with more incidents of abuse and by families with more citations for abuse -- may be one of the reasons for the frequent moves. Agency involvement again is perceived as a stress to a greater degree by these families than by families with fewer incidents. The overall impression lent by the pattern of stresses described above is one of unstable family life and unsatisfying or conflicted personal relationships.

The number of incidents recorded for a family after re-opening the case following the closing of the 1st citation is correlated ($p \leq .05$) with a greater variety of perceived stresses: current stress due to economic problems (r = .45), problems with the children (r = .39), and conflicts with relatives (r = .32); and stress at the time of the first citation due to unemployment (r = .31), neighborhood problems (r = .39), pregnancy (r = .53), bill collectors (r = .31), unfulfilled ambitions (r = .28), and with too much social service agency involvement (r = .42).

Perceived (and reported) economic problems appear to be more strongly related to this index than to the other indices, with unemployment and debts contributing to the pressures. In addition, those families whose cases are re-opened and continue to exhibit abusive treatment toward their

children during this time also report more problems with their children, the extended family, personal problems, and the neighborhood.

It is hard to derive a consistent picture of individual stresses reported by families who repeat abusive treatment of their children, when measured by different indices of repetition. Insufficient income is not significantly correlated with repetition of abuse, largely because it is cited as a stress by almost all families, and thus doesn't differentiate repeaters from non-repeaters. Results described earlier in the report do indicate that repeaters of abuse are more likely to be among the poorest families in the study. However, the frequent citation by repeaters of bill collectors as a stress points to the greater economic pressures on these families, perhaps due to poor budgeting, larger families, or for some, more unemployment.

2. Stress factors

In order to identify categories or related groups of stresses, a factor analysis was performed on the correlation matrix derived from the 39 stress dimensions considered in the interview. Seven factors were identified. These, for purposes of analysis, might be labeled: (1) "marital relationship"; (2) "adequacy of income", (3) "social relationships", (4) "legal and physical problems", (5) "problems of parenting", (6) "conflicts with others", and (7) "neighborhood problems". The responses of each interviewee were scored by counting the number of stresses present on each of these factors. Separate factor scores were derived for past stresses (at the time of the first abuse citation) and for current stresses (at the time of the interview). The differences between past and current extent of stress using the seven factor scores were also calculated.

Two stress factors were significantly correlated with the number of abuse incidents recorded for the family: current social relationships ($r = .16$) and current conflict with others ($r = .16$). In addition, there were trends toward significant correlations between number of incidents for the family and inadequate income in the past ($r = .14$, $p = .08$) and number of incidents and current neighborhood problems ($r = .13$, $p = .09$).

Thus, families experiencing the most stress due to lack of sufficient and/or positive interactions with others were those most likely to exhibit repetition of abuse toward their children. In addition, families with financial and neighborhood problems also tended to exhibit repetition of abuse toward children.

F. Characteristics of the children*

The birth records of 314 children from 97 families (from among the 328) were coded and analyzed. Data were gathered on birth weight, weeks of gestation, age of mother at child's birth, indications of pregnancy problems, delivery problems, and abnormalities of the baby. One hundred forty-seven (49.8%) of those children on whom birth record data were gathered were known to be targets of abuse on the basis of the case record analyses.

1. Prematurity

In the present study, the rate of prematurity among targets of abuse was compared to the rate among their non-abused siblings. A significant correlation was found between target status and premature gestation period (less than 36 weeks gestation) ($r = .12$).

6.9% of the targets for whom the gestational period was known were born prematurely as compared to 1.5% of their non-abused siblings.

The hypothesized explanations for the positive relationship between prematurity and abuse include such factors as the increased sensitivity to handling on the part of premature babies, their greater tendency to exhibit colic, distractibility, and sleep disturbances. Others have suggested that separation of the premature newborn from its mother in an isolette weakens the early attachment bonds which are normally being formed between mother and child in the first hours and days of life.

With this issue in mind, the respondents were asked to estimate how soon after their babies' births they were able to see, touch, or hold them. Mothers of children born earlier than 36 weeks gestation, as compared to mothers of full term babies, reported significantly greater time lags before touching or holding those same children ($r = .20$). These findings lend some support to the notion that a greater than usual degree of separation of premature infants from their mothers may increase their risk for subsequent abuse by adding obstacles to the formation of strong bonds of attachment between mother and child. In addition, mothers admitted more often to having thought about preventing the birth of those children who were subsequently born prematurely than they did for their term-birth infants ($r = .15$).

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*Portions of the material presented in Sections F and G of this Summary are drawn from the article by E.C. Herrenkohl and R.C. Herrenkohl, A comparison of abused children and their non-abused siblings, accepted for publication by the Journal of the American Academy of Child Psychiatry.

An unanticipated finding was that all of the breech births in the analyzed birth records were found to be non-abused siblings of targets. While the number is small (N = 9), this finding is provocative. One hypothesis which would require more detailed information about the deliveries for documentation is based on the assumption that breech births are often carried out with no anesthesia, or minimal anesthesia, in order to allow the mother to aid in the delivery process; possibly, the mother's more active participation and alert state in this case allow for more immediate bonds of attachment to the baby, thus providing a greater safeguard against subsequent abuse.

2. Physical abnormalities

While recorded physical abnormalities at birth were not found to be related to abuse, children who were described by their mothers as having more infance-related and developmental problems (e.g., excessive crying, slow weight gain, overall slow development, coordination problems) were more likely than their siblings not so described to have been targets of gross, or life-threatening neglect (r = .12), one of the types of abuse for which families can be cited. In addition, infants whose first Apgar scores were less than 8 were significantly more likely to be cited as targets of gross neglect (r = .22), than those with Apgar scores of 8 or above. Thirteen and nine tenths percent of the neglected children for whom Apgar scores were available (N = 36) were found to have Apgar scores of less than 8 as compared to 5.4% of the non-neglected children for whom these data were available (N = 148). Infants with low Apgar scores were also more likely to be described by their mothers as having had "birth defects" (r = .24), and the mothers tended to have experienced postpartum depression (according to their own reports) more often after the births of these babies (r = .12).

While physical problems at birth did not have a significant correlation to abuse as a broadly-defined phenomenon, they did, in these findings, appear to be related to abuse of a specific type -- namely, life-threatening neglect. It is not clear from these finding whether the special characteristics of the infants made them more difficult and less gratifying to care for and thus less likely to thrive, or whether the emotional problems of the mother during pregnancy were reflected in postpartum depression and

were an antecedent condition to the physical state of the infant which resulted in a citation for neglect.

G. Parents' perceptions of the children

1. Perceived characteristics of children

While some research has lent support to the notion that one child in a family is singled out for abuse as the family scapegoat, the present study found, to the contrary, that almost half of the families in the abusive population had at least two children who were targets of abuse. 20% had at least three targets, and 11% had four targets of child abuse.

However, those children who were targets of abuse were described by their mothers as having exhibited more types of difficulties in their development than their non-abused siblings ($r = .20$), and specifically more emotional-type difficulties (e.g., excessive eating or refusal to eat, eating bizarre materials, frequent temper tantrums, sleeping problems, head-banging, behavior problems, moodiness). These findings applied specifically to those children who were targets of physical abuse or emotional abuse (i.e., threats of violence or abandonment, or isolation for long periods of time in dark rooms or closets). The findings, of course, do not allow one to distinguish between behavior and emotional problems which are the result of abuse, and those which might have provoked abuse. They do, however, underscore the fact that abused children are perceived by their mothers to be "difficult" children.

The targets of physical abuse also tended to be described by their mothers as having physical, personality, or behavior characteristics which reminded them of relatives or of themselves in negative ways (e.g., "thick-headed," "big mouth," "clumsy," "temper," "two-faced," "bad", "crabby.").

2. Perceived influence over children

Respondents were also asked to describe the amount of influence they felt they had over each of their children's happiness, general behavior, achievement in school, and ability to get along with others. The perceived ability to influence the happiness of the child was significantly and negatively related to the number of recorded physical abuse incidents ($r = -.14$), as well as the number of sexual abuse incidents for the child ($r = -.11$). The perceived ability to influence the child's achievement level in school was negatively

related to the number of emotional abuse incidents ($r = -.15$) and physical abuse incidents ($r = -.11$) recorded for the child. Finally, the perceived ability to influence the child's capacity for getting along with others was negatively related to the number of emotional abuse incidents recorded for the child ($r = -.17$).

Mothers of abused children may be said to perceive themselves to have less control or influence over these children than they feel they have over the non-abused siblings of these children.

3. Mother's age

A final result which bears upon all of the above findings is the significant negative correlation which was found between age of the mother at the time of the child's birth and subsequent physical abuse of the child ($r = -.17$), or gross neglect of the child ($r = -.13$). Thirty-two and four tenths percent of the targets of abuse for whom mother's age at child's birth was known were born to mothers under 20; 14.9% of their non-abused siblings were born to mothers under 20 years of age. Younger mothers were more likely to have children who were later abused or grossly neglected. Teenage mothers were also more likely than mothers 20 years or older at the time of the child's birth to feel they had little influence over the child's happiness and general behavior.

H. Attitudes and feelings about child-rearing

Respondents were asked if they had wanted to raise their children differently from the way they were raised. Among the female respondents, 107 of the 150 total respondents said "yes" to this question. Perpetrators did not differ from non-perpetrators in their responses, nor was there any relationship between the number of incidents recorded for a respondent and the response to this question. However, there was a significant (negative) correlation between the response to this question and the number of abuse incidents recorded for the female respondent's family ($r = -.19$) : the greater the number of incidents recorded for a family, the greater the likelihood that the respondent indicated she had no desire to raise her child(ren) differently than the way she was raised.

The way(s) in which a respondent indicated she would like to raise her child(ren) differently were categorized and analyzed. No one category was overwhelmingly mentioned by the respondents as a group. Of those categories with frequency over 10, only one related with a trend toward significance to the number of abuse incidents recorded for a respondent: The smaller the number of abuse incidents, the more frequently encouragement of greater social participation was mentioned ($r = -.16$, $p = .08$).

Respondents were then asked "What traits or characteristics do you feel are important for your child(ren) to develop?". Getting along well with others was the most frequently (60.7% of respondents) mentioned broad category (this includes respect for others and being affectionate). Of the categories with frequencies greater than 10, several were correlated with number of abuse incidents for the respondent and status as perpetrator or non-perpetrator at a significant or close to significant level. Perpetrators were more likely to mention obedience ($r = .17$) and self-sufficiency, meaning ability to survive on one's own ($r = .14$, $p = .07$) and less likely to mention personal integrity (this includes self-respect and sincerity) ($r = -.20$) than were non-perpetrators. The more abuse incidents recorded for the respondent, the smaller the likelihood of her mentioning personal integrity ($r = -.18$) and the greater the likelihood of her mentioning obedience ($r = .27$). It would seem that female respondents who abused their children were more concerned with raising children who did not compel the respondents to bend to their (the children's) needs and desires, while non-abusing female respondents were more concerned that their children learn to value their own talents and feelings, i.e., develop self-respect.

Similar results were obtained when the responses to this question were correlated with the number of incidents recorded for the family: the greater the number of incidents, the more likely was obedience to have been mentioned ($r = .17$) and the less likely was the development of skills to have been mentioned ($r = -.19$)

Respondents were asked to indicate whether they felt there were satisfactions to being a parent. Almost all respondents (93% of females and 88% of males) answered affirmatively. Watching the children grow, enjoying giving of oneself, having a guarantee against loneliness, and bringing one's own into the world were the four most frequently cited categories among female respondents, in that order.

Of these satisfactions, bringing one's own into the world was significantly and positively related to the number of abuse incidents recorded for the female respondent ($r = .17$).

Respondents were asked what they felt their strong points as parents were. Perpetrators were more likely to mention teaching ($r = .16$) than were non-perpetrators.

I. Childhood experiences of parents in abusive families

In the interview, respondents were asked if they felt they had been mistreated as children by their caretakers; 26.7% of the female and 21.6% of the male respondents answered in the affirmative. Most of the male respondents answering in the affirmative cited physical abuse as the kind of mistreatment received; among the female respondents who felt they had been mistreated, one-half described being physically abused, one-third described being singled out among siblings for less love or more work or blame, and one-third described not being given enough love or attention. We found that for the female respondent, the more abuse incidents recorded in the case record for her, the greater the likelihood that she felt she had been mistreated as a child; this association was statistically significant ($r = .18$). The relationship between perpetrator status and feeling mistreated as a child tended toward significance ($r = .20$, $p = .10$), with perpetrators more likely to feel they had been mistreated.

Respondents were also asked if they felt they had been neglected as children. 40.7% of the 150 female and 33.9% of the 65 male respondents answered in the affirmative. For both females and males, a higher proportion of the perpetrators felt they had been neglected than of non-perpetrators, but in neither case was the difference statistically significant.

Respondents were also asked specifically about the amount of affection, pride, and criticism and attention directed towards them by their major caretakers, and the degree to which they felt ignored by major caretakers. There was a negative relationship between the number of incidents recorded for a female respondent and the presence of a major caretaker who seemed to be proud of her at least some of the time, but this was not statistically significant ($r = -.14$, $p = .08$). The number of citations for female respondents related to the presence of caretakers perceived as seldom being proud of the respondent ($r = .17$). The number of citations for a female respondent was

related to the presence of a major caretaker who seemed to ignore the respondent at least some of the time ($r = .15$, $p = .06$). In addition, there not being a major caretaker who was felt to ignore the respondent at least some of the time was negatively associated with both the number of abuse events recorded for female respondents and the number of citations received by female respondents ($r = -.23$, $r = -.21$). Among male respondents, there was a tendency for perpetrators to have had a major caretaker who criticized the respondent most of the time ($r = .21$, $p = .09$).

Respondents were asked about several other aspects of their own child-rearing, among them the amount of time he/she lived with each natural parent in the first 18 years of life. Those female respondents who were identified as perpetrators of abuse spent significantly less time living with their natural mothers during the first six years of life than did non-perpetrators ($r = -.17$). Female perpetrators spent significantly less time living with their natural fathers than did female non-perpetrators for the first three ($r = -.17$), first six ($r = -.21$), and first 18 years of life ($r = -.17$), with time lived with father during the years birth to six being the most strongly related to categorization as a perpetrator. The number of incidents of abuse recorded for female respondents was also negatively related to the amount of time lived with the natural father for the first six years of life ($r = -.17$). There were no significant correlations for male respondents related to the amount of time lived with each natural parent.

J. Services

1. Services and recurrent abuse

a. Casework services

At the time of the case record coding, the total number of months of service to the 260 validly cited families ranged from 1 to 240. Twenty-nine percent of the families received one year or less of service, while 35% received more than three years of service. The number of case openings ranged from 1 to 12. The amount of time cases have remained open from the opening with the 1st citation ranged from a minimum of less than one month to 109 months.

Among families with at least one valid citation, 29.6% had a case opening and closing prior to their first citation for abuse. Of the

families with a valid citation, 12.3% had more than one case opening and closing prior to the opening in which the first citation occurred.

The total number of incidents for the family is positively related to length of service during the first citation case opening ($r = .47$), and to months of service received before the first citation is received ($r = .40$).

The number of casework contacts is correlated with the number of physical abuse incidents for the family ($r = .45$), the number of emotional abuse incidents ($r = .22$), and the number of neglect incidents ($r = .28$). It is also correlated with placement of children for protection from abuse ($r = .28$), and for placement for other reasons ($r = .41$).

b. Participation in therapy

Fifty-eight of the 328 families had an adult member involved in some kind of therapy--most of them in group therapy. It was found that 60% had no incident either after the last therapy contact or after one year or more following the first therapy contact; 26% had one or more child abuse incidents after the last therapy contact. 35% had one or more incidents after at least one year had elapsed from the time of the first therapy contact. Examination of the number of therapy contacts showed that by and large, the families in the non-repetition group had substantially more therapy contacts than had those where there was repetition.

Discontinuation of abuse thus seems to be associated with more intense therapy in the sense of numbers of therapy contacts. In all likelihood, those families with few therapy contacts were those who were highly resistant to the treatment process and did not cooperate, refusing or failing to attend therapy sessions. Thus, repetition of abuse occurs more frequently among families who do not cooperate with the therapy treatment process while cooperation, as measured simply by attendance at therapy sessions, is associated with decreased likelihood of further abuse.

The number of therapy contacts was not significantly correlated to the total number of abuse incidents recorded for the family. There is a correlation between therapy contacts and number of incidents after citation 1 closing and re-opening ($r = .23$).

2. Services and characteristics of families

a. Demographic characteristics

Several statistically significant correlations were found with months of casework service provided. This variable was correlated with the respondent's having attended special education classes (r = .27), with the respondent's not attending religious services (r = -.17), the years of education completed by the male head (r = -.24), the income level of the family (r = -.26) and whether the family received public assistance (r = -.26). The picture here is that casework service is provided to those with less income, less education and who are not related to community activities such as religious organizations.

b. Respondent's childhood

The number of months of casework service provided a family was found to be negatively related to the amount of time the female respondents reported living with her natural mother during the first three years of life (r = -.18), six years of life (r = -.21) and the first eighteen years of life (r = -.17). No relationship was found for male respondents.

c. Child-rearing

Months of service were negatively correlated with the female respondent indicating she wants to raise her children differently than she was raised (r = -.17).

d. Stresses on family

Months of service was found to correlate significantly and positively with the number of different types of stresses reported by the female respondent at the time of the interview or the time of the first citation (r = .21). Months of service was also found to correlate significantly with several types of stress at the time of the interview: insufficient income (r = .17); conflict with neighbors (r = .18); breakup of family (r = .20), bill collectors (r = .19). Conflict with relatives (r = .26), physical illness (r = .16) and retardation (r = .25). There were also correlations of months of service with stresses the time of the first citation: frequent family moves (r = .31), conflict with neighbors (r = .20), problem with other adults (r = .26), bill collectors, (r = .19), conflict with relatives (r = .26) and retardation (r = .21).

Months of casework service are correlated with stress factors: past adequacy of income ($r = .16$), current legal problems ($r = .19$), past and current conflict with others (respectively $r = .23$ and $r = .26$), and current neighborhood problems ($r = .18$).

When months of casework services are related to changes on the stress factors as indicated by female respondents (comparing past to present), there is one statistically significant correlation. This was related to legal and physical problems ($r = .22$). This negative correlation probably reflects legal battles over foster placement of children. For the male respondents, there is a significant relationship between months of service and diminution of conflict with others ($r = .27$).

K. Implications for protecting children

The results of the study suggest a variety of approaches for the service delivery end of child abuse programs for strengthening efforts to protect children.

1. By and large, little support was found for the notion that children who are targets of physical, emotional, or sexual abuse are "different" from birth. Pregnancy problems, delivery problems, and physical abnormalities of the baby were unrelated to these kinds of abuse. These children are, however, viewed more negatively by their parents than their non-abused siblings. They are also seen as more "difficult" children, as exhibiting more behavioral problems than their non-abused siblings. They are more likely to remind their parents in negative ways of themselves or others and appear to thus serve as the target of projections on the part of their mothers making them vulnerable, in time, to being targets of abuse. Indeed, as various authors have pointed out, the negative perception of the child can interfere with therapeutic treatment plans for the child if not dealt with simultaneously with the child's treatment program.

2. It should be noted that correlations found between characteristics of the child and abuse, while significantly different from chance, are modest correlations which, on the whole, account for a fraction of the variance associated with the extent of and child-focused abuse. Thus the role of the "child" in child abuse, while real, is only a small part of the total picture. Filling out the picture requires focusing, in turn, on the history of the perpetrator, the family environment as a whole, and the general cultural climate in which the abuse takes place.

There are suggestions from the data reported that some children, born prematurely and/or with deficiencies in functioning at birth, may be at higher risk than full term infants for failure-to-thrive, or gross neglect, on the part of their mothers. Early failure to establish strong bonds of attachment may be implicated in these consequences, perhaps as a consequence of early separation between mother and child, perhaps as a consequence of early rejection of the baby by the mother.

The babies of teenage mothers, on the whole, appear to be at higher risk for subsequent abuse, and appear to be seen by their mothers as less open to their mothers' influence. This in turn may reflect the mothers' feelings of helplessness and loss of a sense of control over their lives with the arrival of children so early in their own development.

3. Families in which violence toward the spouse and other adult members is known to occur are high risk families for continuing abuse toward children. In these families, careful assessment of the quality of the adult interactions should be part of any assessment of the adults' ability to care for their children.

4. Parents who resist the treatment process by poor attendance at therapy sessions, for example, are at higher risk for continuing abuse toward children than are parents who satisfy a minimal standard of cooperation, namely, attendance at therapy sessions. Efforts to draw these families into some intensive treatment program should be doubled.

5. More attention needs to be paid to treatment programs for the abused children. Children who are abused in one way (i.e., physically, emotionally, or sexually) tend to be abused in other ways as well, multiplying the psychological trauma suffered by these children.